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*Looking ahead
to a
better environment*

NRA
CORPORATE PLAN
1995/96

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NRA

National Rivers Authority

Guardians of
the Water Environment

THE NATIONAL RIVERS AUTHORITY

Mission And Aims

Our Mission

We will protect and improve the water environment by the effective management of water resources and by substantial reductions in pollution. We will aim to provide effective defence for people and property against flooding from rivers and the sea. In discharging our duties we will operate openly and balance the interests of all who benefit from and use rivers, groundwaters, estuaries, and coastal waters. We will be businesslike, efficient and caring towards our employees.

Our Aims

- To achieve a continuing overall improvement in the quality of rivers, estuaries, and coastal waters, through the control of pollution.
- To manage water resources to achieve the right balance between the needs of the environment and those of the abstractors.
- To provide effective defence for people and property against flooding from rivers and the sea.
- To provide adequate arrangements for flood forecasting and warning.
- To maintain, improve and develop fisheries.
- To develop the amenity and recreational potential of inland and coastal waters and associated lands.
- To conserve and enhance wildlife, landscape, and archaeological features associated with inland and coastal waters of England and Wales.
- To improve and maintain inland waters and their facilities for use by the public where the NRA is the navigation authority.
- To ensure that dischargers pay the costs of the consequences of their discharges and, as far as possible, to recover the costs of water environment improvements from those who benefit.
- To improve public understanding of the water environment and the NRA's work.
- To improve efficiency in the exercise of the NRA's functions and to provide challenge and opportunity for employees and show concern for their welfare.

For further information about the NRA's:

*Corporate Strategy,
Water Quality Strategy,
Water Resources Strategy,
Flood Defence Strategy,
Fisheries Strategy,
Recreation Strategy,
Conservation Strategy,
Navigation Strategy,
R&D Strategy,
IS Strategy,
Corporate Plan 1995/96,
Annual Report and Accounts 1994/95.*

please contact:

Corporate Planning Section,
National Rivers Authority,
Rivers House,
Waterside Drive,
Aztec West,
Almondsbury,
Bristol BS12 4UD.

Further copies of this Plan and other NRA publications can also be obtained from the NRA Regional Offices listed on the inside back cover. Copies of Catchment Management Plans can also be obtained from each NRA Regional or local Area Offices. This is in accordance with the NRA's commitment to freedom of information and Citizen's Charter principles.

This document is published by:

National Rivers Authority,
Rivers House,
Waterside Drive,
Aztec West,
Almondsbury,
Bristol BS12 4UD.
Tel: 01454-624400
Fax: 01454-624409

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Approved by members

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LETTER TO THE SECRETARIES OF STATE AND MINISTER OF AGRICULTURE, FISHERIES AND FOOD

The NRA

Over the past 6 years the NRA has demonstrated that it is a highly effective environmental watchdog with real teeth. We have received widespread support from the general public, industry and environmental interest groups, and firmly established ourselves as the "Guardian of the Water Environment" and strongest environmental protection agency in Europe. Last year we were awarded the Citizen's Charter Mark.

The Environment Agency

We support the Government proposals for a new Environment Agency by merging the NRA, HMIP and WRAs. During the period leading up to its creation we will continue to actively assist and provide advice to the Government and the Environment Agency Advisory Committee (EAAC). We will encourage even more close working with our future colleagues in HMIP and the WRAs.

During this period of change, our aim is to ensure that the momentum of the NRA's work continues without any significant diminution of service, that the NRA's management expertise is made available to the EAAC, and that the Environment Agency inherits the NRA in a healthy and robust position, so that it will be as effective as possible from day one.

Setting up costs associated with the creation of the Agency, and any new costs that will arise from the Agency's new statutory duties and powers, have been excluded from this plan on the grounds they have been included in a preliminary 1996/97 Corporate Plan and 1995 PES submission produced by the EAAC.

Our future strategy and operational priorities

Our Corporate strategy, plus strategies for each core function, Research and Development and Information Systems, along with our Customer Charter, will continue to provide our strategic direction during the period leading up to the creation of the Environment Agency.

Our top priority will be to continue to deliver all our statutory functions through integrated catchment management. Maximum expenditure will, wherever possible, be concentrated on delivering water quality improvements that will benefit our other functions.

We plan to complete the implementation of new financial, personnel and payroll and other management information systems by April 1996 that will help the Agency deliver better value for money.

Charging policy

This plan assumes that any future overall increases in abstraction and discharge charges, which are based on full cost recovery, are only at a level at, or below, the going rate of inflation. This will help the overall UK economy.

Although we will seek to achieve the Government's target of 60% cost recovery for fisheries and navigation, this may mean licence fees being increased by significantly more than inflation to maintain current standards of service. Whilst we will seek to adopt a more commercial approach and work more closely with industry and business associated with these activities to help compensate for reducing levels of grant-in-aid, continually increasing charges will probably reduce participation, and thus income.

Efficiency

Our 1993/94 Corporate Plan set out some very ambitious savings targets of some £196m between 1994/95 and 1996/97, meaning our expenditure plans are lower than presented in earlier Corporate Plans. The NRA's 1995/96 budget incorporates savings of £69m. As in 1994/95 we aim to deliver this without any significant reduction in our outputs or prejudice to our Mission.

In the year leading up to the Agency, while we will investigate options of how to deliver further efficiencies in the future, we will not implement new actions until considered by the EAAC. Our efforts will continue to be focused on maintaining a regime of taut financial control which will benefit the Agency, through the Scheme of Delegation.

We are of the view that the Environment Agency should be given greater flexibility to manage its overall allocation of GIA to deliver integrated catchment management and efficiency savings.

Government Grants

This plan seeks to provide justification for the transfer of the NRA's current and future levels of grant support, as announced in November 1994, to the Environment Agency from April 1996.

We consider that any further reduction in Government grants or pressure to deliver greater efficiency savings, which due to further GIA reductions have increased, will undoubtedly affect the discharge of our statutory obligations and prejudice a seamless transfer to the Environment Agency.

Lord Crickhowell
Chairman
June 1995

Mr. E.P. Gallagher
Chief Executive

CHAPTER 1 - EXECUTIVE SUMMARY

Introduction

This is the NRA's 6th Corporate Plan. It sets out our future priorities and spending plans up to the creation of the Environment Agency and its likely vesting on 1st April 1996. The information contained within this Plan for 1996/97 and later years will also form part of the basis of the EAAC preliminary 1996/97 Corporate Plan and 1995 PES submission for the Environment Agency.

Performance Against Our Corporate Strategy And Last Plan

We are pleased to report that we are achieving the strategic targets we set ourselves in our corporate and core function strategies, and the shorter term priorities we set ourselves in our last Corporate Plan. For example in 1994/95 we have:

Cross-functional priorities

- Assisted Government and the EAAC in planning for the Environment Agency;
- Presented evidence to the House of Lords Sustainable Development Committee;
- Been awarded the Citizen's Charter Mark for the quality of our public services from the Prime Minister;
- Fully established our new organisation structure of 8 regions and 26 areas based on river catchments across England and Wales;
- Produced 41 consultation documents and 15 final Catchment Management Plans;
- Almost 500 senior and middle managers have attended management development courses at Sundridge Park Management Centre;
- Completed environmental audits of 2 NRA sites;
- Continued our market testing programme; Project Engineering Services and Transport and Mobile Plant Maintenance were subject to successful negotiated takeovers. Our Internal Audit Service competed for, and won, a 5 year contract against external competition;
- Saved £3m per annum by creating a new National Information Systems service;
- Extended external collaboration on our R&D programme to 25%.

Core function priorities

- Reported a 15% improvement in river water quality between the two 3 year periods of 1988-90 and 1990-92;
- Reported a 3.1% improvement in bathing water quality compliance to 82.5% and reductions in Red List substances, achieving targets of 50% for cadmium and 70% for mercury;
- Advised Government and OFWAT about environmental requirements for AMP2 as part of the Periodic Review of "K" and secured commitment for spending of £522m by the Water PLCs for the river improvement schemes with the highest priority identified by the NRA;
- Developed plans in selected river catchments to implement statutory WQOs;
- Produced reports on pollution problems caused by contaminated land and abandoned mines;
- Launched national and regional water resources development strategies;
- Achieved abstraction licence inspection targets and alleviated 3 low flow problems over 8km of river;
- Maintained 37000km and constructed 160km of flood defence;
- Developed a standards of service framework and began a flood defence management IS system;
- Undertook a review of fisheries activities to develop a robust financing strategy;
- Introduced more cost effective and accessible fishing licence distribution arrangements with Post Office Counters Limited;
- Obtained MAFF approval and introduced a nationally consistent close season for coarse fish in rivers and enclosed waters;
- Undertook over 300 collaborative recreation and conservation projects with other bodies.

Efficiency

- Reduced planned operating costs by £50m (over 10%) between our original 1994/95 plan and our budget for 1995/96, and kept increases in most charges below inflation;
- Reduced total staffing numbers by 372 posts (5%), including 209 as a result of market testing, without any compulsory severance, resulting in improved resource targeting to meet corporate objectives;

- Achieved further savings of 103 posts from the mergers and other efficiencies in Northumbria and Yorkshire, and Wessex and South West regions;
- Achieved savings of £2.75m and 103 posts from the creation of the National Laboratory Service and £3m and 23 FTE from the creation of the National Information Systems service;
- Saved over £2m through national procurement initiatives and held Total Administrative Costs under £85m;
- Identified savings of about £2m from the future implementation of internal audit recommendations.

Strategy And Future Priorities

Cross-functional priorities

We will continue to:

- Pursue our mission and aims and respond to pollution, flooding and other environmental emergencies;
- Develop and implement an integrated approach to environmental management through locally agreed catchment management plans;
- Undertake the 1995/96 programme of on the ground environmental improvement projects;
- Advise planning authorities about planning applications which may impact on the future status of the water environment.

Priorities between core functions

For our core functions sponsored by the DoE, or part financed by grant in aid, our priorities are:

- Water quality,
- Water resources,
- Fisheries,
- Conservation,
- Navigation,
- Recreation.

Flood Defence is sponsored by MAFF/WO and is financed by local authority levies and MAFF/WO capital grant.

Priorities within core functions

Water Quality

- Continue to implement the NRA water quality strategy;
- Introduce SWQOs in 8 pilot catchments in England and Wales;
- Undertake the 1995 quinquennial river water quality survey;
- Influence drafting of new and revised EC Directives on water quality.

Water Resources

- Continue to implement the NRA water resource strategies;
- Continue to implement the groundwater protection policy;
- Maintain progress on the alleviation of low flows programme.

Flood Defence

- Continue to implement the flood defence strategy;
- Pilot introduction of the flood defence management system;
- Undertake Circular 30/92 surveys.

Fisheries

- Continue to implement the NRA fisheries strategy;
- Maintain progress on implementing the fisheries activity review and financing strategy;
- Introduce new charges for net licences.

Conservation

- Continue to implement the NRA conservation strategy;
- Implement the river habitat survey methodology.

Navigation

- Continue to implement the NRA navigation strategy;
- Complete the navigation activities review;
- Develop a financing strategy and new charging policies.

Recreation

- Continue to implement the NRA recreation strategy.

Specific priorities for our business support services

- Fully implement our Integrated Accounting System (IAS), Water Archive and Monitoring System (WAMS), and Personnel and Payroll (P&P) IS systems by April 1996;
- Implement the results of the 1994/95 market testing programme and complete the 1995/96 programme of strategic options studies;
- Continue to implement and exploit the results of R&D projects.

Efficiency And Value For Money

All expenditure figures are on an accruals basis, based on published estimates and after taking account of our efficiency savings package. We have planned on the basis that both staff costs and non-staff costs will increase by an annual average of 3½% throughout the plan period. Our other planning assumptions are provided in Chapter 4 on page 27.

Our future spending plans for protecting and improving the environment over the next four years amount to around £2000m. By 1997/98 our total expenditure and income (assuming indicative Government grants remain as announced in 1994) will balance.

Due to the implementation of our efficiency savings programme, described on page 72, our future expenditure on

core functions is less than that previously planned. However our aim will be to achieve the programme without prejudice to the pursuit of our mission as "Guardians of the Water Environment".

Water quality will remain our highest priority for any new spending. This will also benefit water resources, fisheries, conservation and recreation. Total expenditure on water resources and flood defence will be held around current levels. Flood defence balances will be run down to 5-10% of total annual spend as required by MAFF.

Income from fisheries, recreation and navigation will increase but future expenditure will be reduced as a result of reducing levels of Government grant in aid. Reduced GIA will particularly affect migratory salmonid fisheries. While we will aim to recover approximately 60% of our fisheries and navigation costs from charging income, as requested by Government, this may mean that increases to licence fees significantly above inflation will be required.

We have one long-term annual need for around £13m GIA (index linked) to finance unfunded pension liabilities inherited from predecessor water authorities.

Between our 1993/94 baseline Plan and 1996/97 our staff numbers are planned to reduce by 1210 FTE posts from an approved figure of 8630 to 7420 by 1996/97. These figures make no assumptions about the future results of our market testing programme.

We hope that Government will recognise the enormity of the challenge and respect our judgement as to the point of balance between achievable cost savings and essential real world delivery. We believe we have struck the right balance. Delivering further efficiency savings would, in our judgement, pose a serious threat to the NRA's aims and objectives, leading to a decline in the environmental improvements which have been hard won by the NRA since its creation in 1989.

Planning For The Environment Agency

In preparing this Plan we have been mindful that responsibility for fisheries GIA may be transferred from DoE to MAFF in April 1996, and that our spending plans for 1996/97 and later years, along with data from HMIP and the WRAs, will form the majority of the baseline expenditure plans of the Environment Agency. Close liaison has been established, and will continue, with the EAAC to ensure consistency between this Corporate Plan and a preliminary 1996/97 Corporate Plan and 1995 PES submission for the Environment Agency.

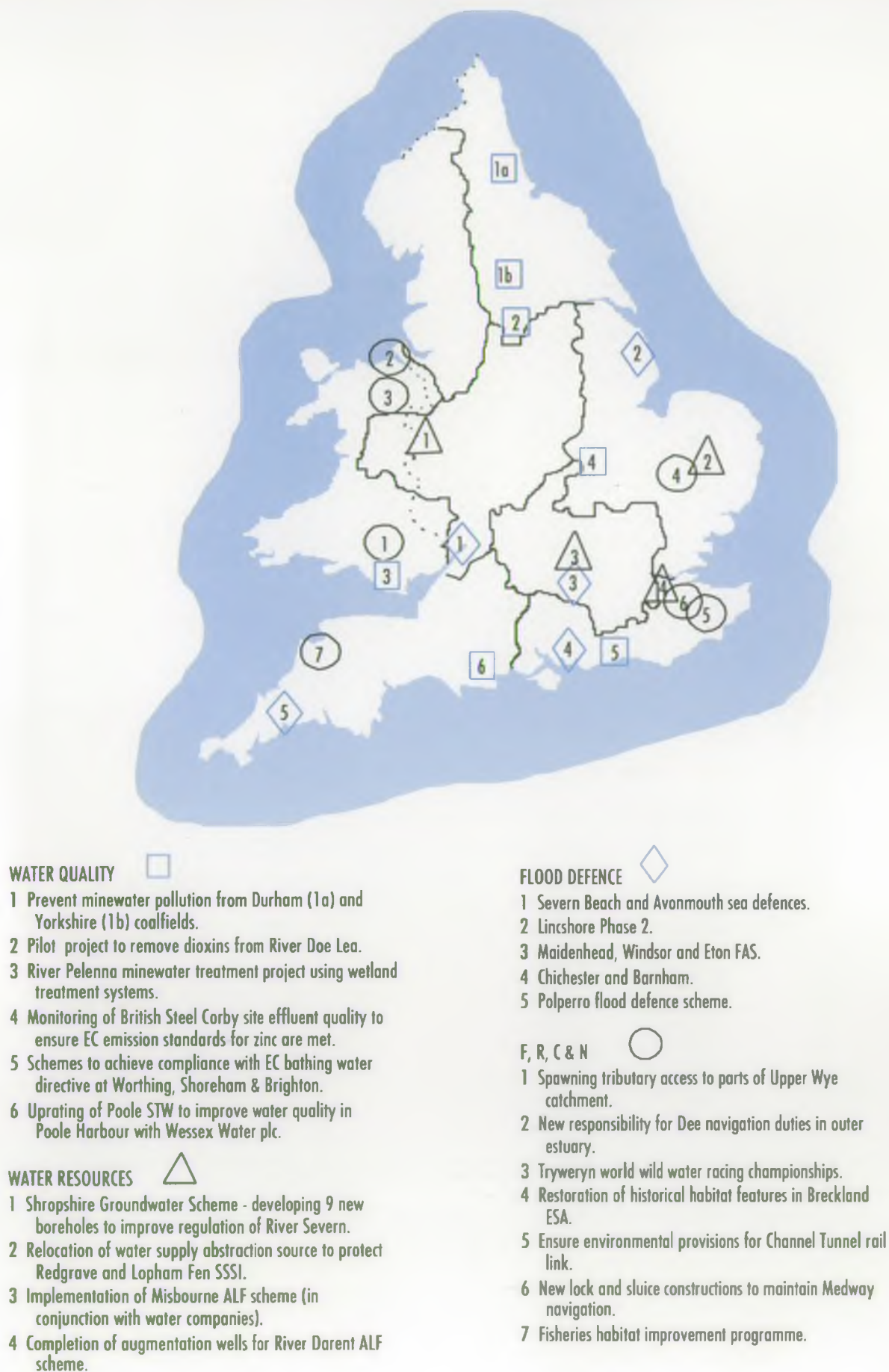
Figure 1- Executive Summary Resource Table

£m	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
EXPENDITURE							
Water Quality	75.0	83.1	88.1	84.4	85.8	87.5	89.2
Water Resources	77.6	72.4	75.4	76.3	76.5	78.8	81.2
Flood Defence	227.8	231.8	242.0	249.4	261.8	256.6	263.9
Fisheries	23.3	25.5	21.6	21.8	21.3	21.8	22.3
Conservation	3.2	3.4	3.5	3.7	3.1	3.1	3.1
Navigation	8.4	7.8	6.0	6.2	6.0	6.2	6.3
Recreation	2.0	2.5	2.1	2.2	1.7	1.7	1.7
Personnel Buyouts	0.0	0.0	4.5	0.0	0.0	0.0	0.0
Unfunded Pensions	11.3	11.7	12.2	12.3	12.5	12.9	13.3
TOTAL EXPENDITURE	428.6	438.2	455.4	456.3	468.8	468.6	481.1
FUNDED BY:							
Income	335.9	335.7	291.1	332.7	350.3	362.6	375.3
MAFF / Welsh Office Grants	34.5	34.5	39.7	42.4	49.4	49.4	49.4
DoE Grant In Aid	71.1	71.2	67.9	58.9	56.9	56.9	56.9
SURPLUS / (DEFICIT)	13.0	3.2	(56.8)	(22.3)	(12.2)	0.3	0.5
TOTAL STAFFING	8241	7709	7522	7420	7420	7420	7420

There may be minor arithmetical differences in this table due to rounding.

Apparent deficits will be funded by transfer of surpluses from the Water Resources and Flood Defence accounts, and end of year carry forward provisions.

Figure 2 - Examples of Real World Activities Planned for 1995/96



CHAPTER 2 - THE NATIONAL RIVERS AUTHORITY

The NRA In Context

Establishment

The National Rivers Authority (NRA) came into being following Royal Assent of the 1989 Water Act on 6th July 1989. The NRA took its full statutory duties to protect and improve the water environment in England and Wales at vesting on 1st September 1989. The same Act also established the private water utilities and OFWAT. The 1991 Water Resources Act consolidated the 1989 Water Act and other related legislation.

Assuming the 1995 Environment Bill currently being discussed by Parliament receives Royal Assent in July 1995, the functions of the NRA will be absorbed by the Environment Agency on April 1st 1996, along with HMIP and 83 WRAs.

Responsibilities

The NRA has statutory duties and powers under the 1991 Water Resources Act for water resources, pollution control, flood defence, fisheries, recreation, conservation and navigation throughout England and Wales. Its water quality and fisheries responsibilities extend out to 3 and 6 nautical miles from the coast respectively.

The NRA also has special environmental regulatory responsibilities, which complement those of OFWAT, the economic regulator, in respect of the privatised water utilities. It has also been designated as the Competent Authority for twenty European Community Environmental Directives by Government.

Relationships

The NRA is a Non-Departmental Public Body, which has established itself as the strongest environmental protection agency in Europe, and a very effective "Guardian of the Water Environment". Its sponsor in Government is the Department of the Environment. It also has important policy links with the Ministry of Agriculture, Fisheries and Food (MAFF) over flood defence and fisheries, and the Welsh Office over the principality. It has close links, and memoranda of understanding, with other environmental bodies, such as English Nature, the Health and Safety Executive and the Natural Environment Research Council (NERC).

Management

The Authority has a Board of 14 members appointed by the Secretary of State for the Environment, the Secretary of State for Wales and the Minister of Agriculture, Fisheries and Food.

Each Region has three statutory Regional Committees and a Regional Advisory Board. There is a statutory Advisory Committee for the Secretary of State for Wales. Some regions also have Local Flood Defence Committees.

The Chief Executive, who is a member of the Board, chairs an Executive Group, comprising 8 National Policy Directors and 8 Regional General Managers.

Organisation

The Authority has Head Offices located in London and Bristol and operates through 8 Regions and 26 Areas in England and Wales. The Head Office is primarily concerned with planning, policy development and performance monitoring, and the regions and areas with policy implementation and day to day operations.

Some business support activities including IT, R&D, Laboratories, Health and Safety, Training and Development and Procurement are organised as National Services, and National Centres of expertise on topics such as Groundwater and Instrumentation have been established in specific regions. These are illustrated in Figure 3.

Resources

The Authority's budget in 1995/96 is £456m with a complement of 7420 staff. About 75% of the Authority's costs are recovered from charges and levies from the public, industry and local authorities, with the remaining 25% from Government grants.

The Authority's expenditure naturally falls into that which is DoE and MAFF funded. The largest expenditure and the majority of staffing is employed on flood defence which is supported by £42m of MAFF/WO capital grants. Water quality, fisheries, recreation, conservation, navigation and some pension commitments are partly funded by £59m of DoE GIA. Water resources is fully funded through charges on abstractors.

The NRA does not receive EC funds directly but, by working in partnership with other bodies, participates in projects receiving grants from the ERDF and LIFE programmes.

In terms of geographical distribution, the majority of resources and staffing are based in the 26 areas of the NRA serving the public and industry. The Head Office comprises less than 2% of total resources

Figure 3 - Our Regions, Areas, National Centres and Services



— REGIONAL BOUNDARY
 — AREA BOUNDARY
 - - - - NATIONAL BOUNDARY

● NATIONAL SERVICE or CENTRE

- 1 - National Laboratory
- 2 - Environmental Policy Unit, Toxic and Persistent Substances
- 3 - Fisheries Laboratory
- 4 - Water Resources Demand Management
- 5 - Environmental Surveillance and Instrumentation
- 6 - Health & Safety, Training, Procurement, Market Testing, IS, R&D
- 7 - Groundwater
- 8 - Rod Licence Administration

Figure 4 - NRA Organisation and Resources

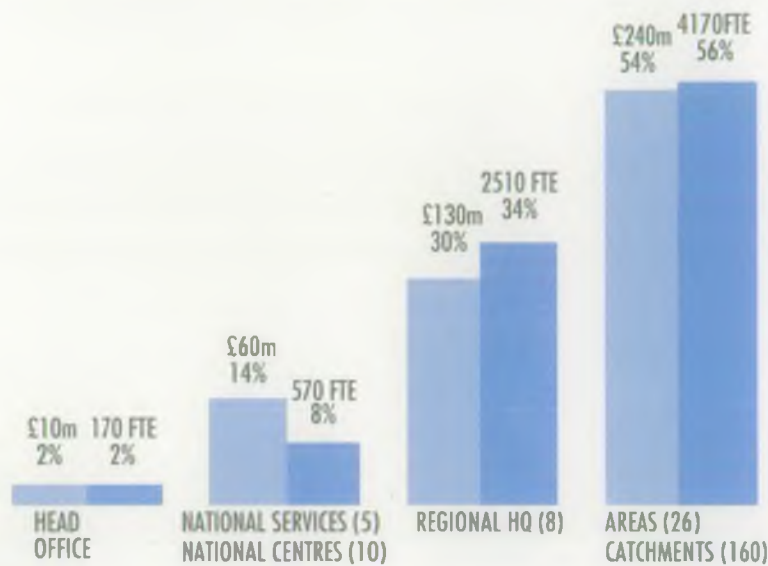


Figure 5 - Staffing by Function

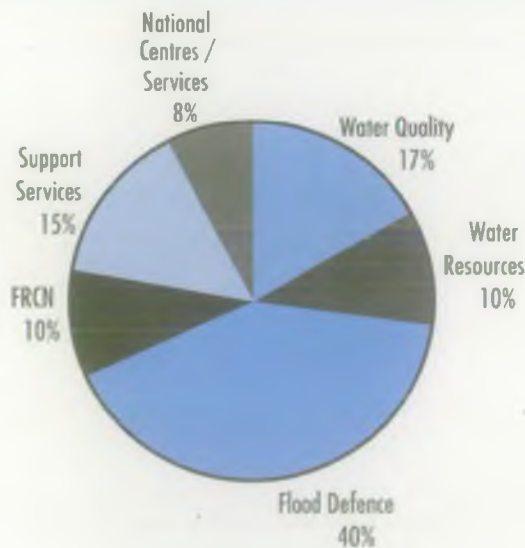


Figure 7 - Sources of Funds

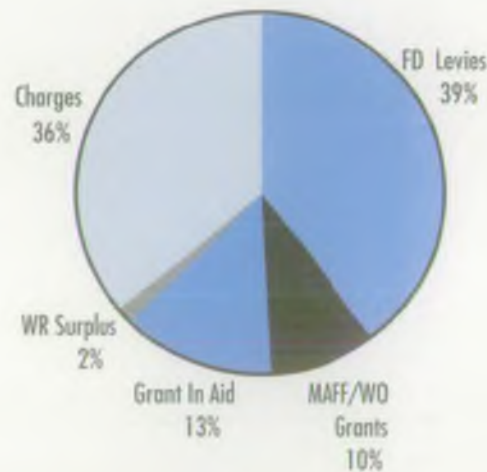


Figure 6 - Expenditure by Core Function

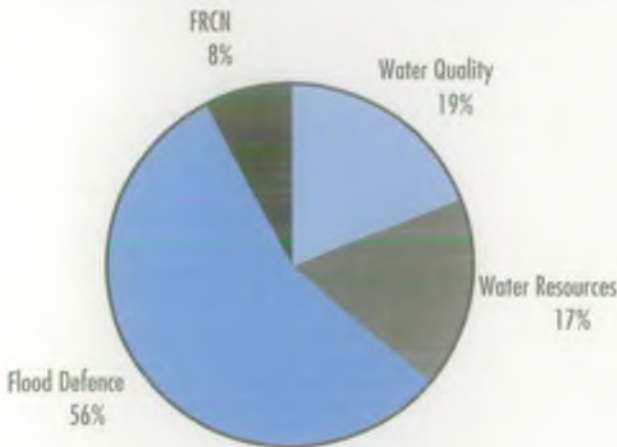
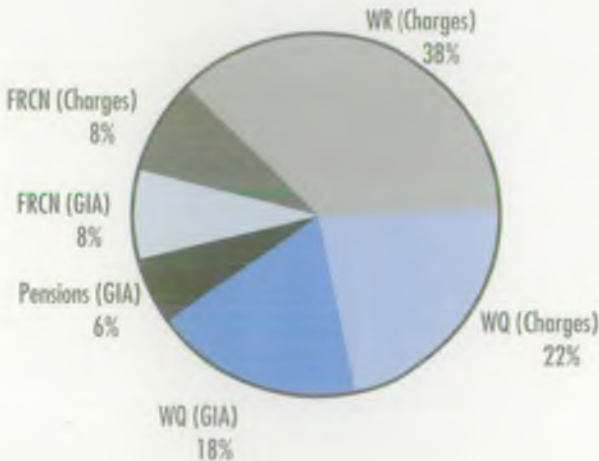


Figure 8 - DoE Sponsored Functions



Corporate Planning Framework

The NRA's Financial Memorandum and Annex A, containing corporate planning guidance issued by the DoE, require it to develop and operate a corporate planning process and associated management information systems.

Figure 9 details the NRA's corporate planning framework. It is based around a long term corporate strategy and core function strategies, and regional and catchment management plans. Each annual Corporate Plan rolls forward our corporate and function strategies. The Corporate Plan is a key management tool for the NRA Board, Executive, Senior Managers and employees, to whom it is widely disseminated by means of cascade briefing, newsletters and roadshows.

The Corporate Plan and a summary leaflet are published to comply with Citizen's Charter principles and the Freedom of Access to Environmental Information Regulations. The NRA's achievement of its Corporate Plan is reported through the NRA Annual Report and Accounts as required by the Financial Memorandum and Annex A on Corporate Planning.

The NRA corporate planning process is led by the Board and Executive Group and coordinated by Head Office Corporate

Planning Section. All functions, national services and centres, regions and areas are involved in the process.

Through their work, the Secretary of State for Wales' Advisory Committee, Regional Advisory Boards and Statutory Regional Committees also input to the process.

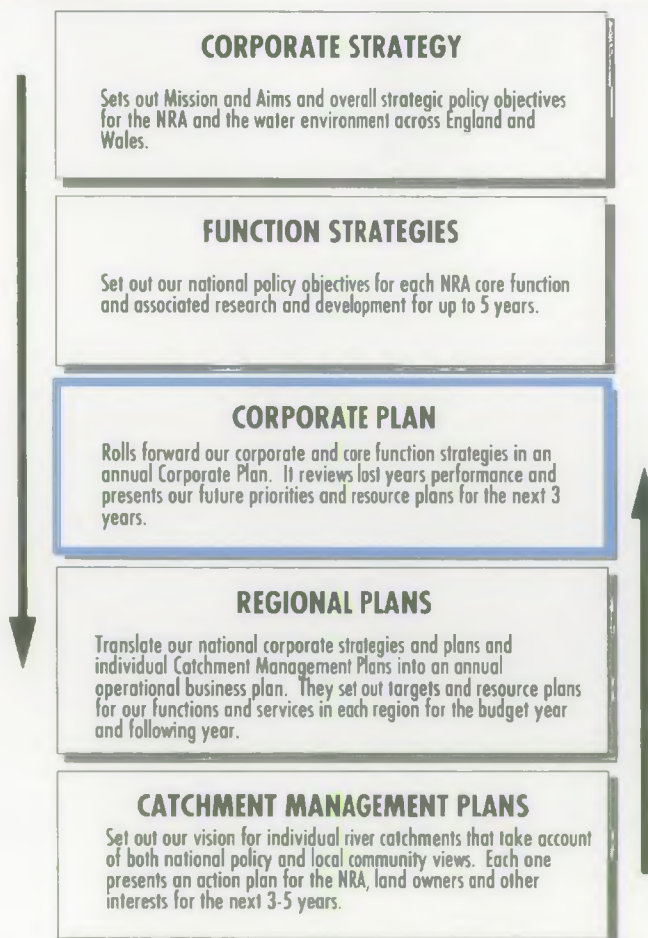
The NRA's Corporate Plan is used for annual discussions on all activities between the NRA, DoE and Government Ministers during each year's Public Expenditure Survey (PES) round.

For flood defence a 5 year Medium Term Plan (MTP) to obtain MAFF grant for capital projects is also prepared for MAFF Ministers.

Ministers and their officials examine the NRA plans to assess the NRA's future priorities, outputs, income from charges, levels of total, revenue, capital and administrative expenditure, and efficiency savings.

They then determine future levels of DoE GIA and MAFF/WO capital grants announced by the Chancellor in the November budget and PES statement to Parliament.

Figure 9 - Corporate Planning Framework



NRA Corporate Strategy

During the period up to the creation of the Environment Agency our Corporate strategy, Core Function strategies, IS and R&D strategies, and our Customer Charter will provide our strategic direction.

Our Mission;

We will protect and improve the water environment by the effective management of water resources and by substantial reductions in pollution. We will aim to provide effective defence for people and property against flooding from rivers and the sea. In discharging our duties we will operate openly and balance the interests of all who benefit from and use rivers, groundwaters, estuaries, and coastal waters. We will be businesslike, efficient and caring towards our employees.

Our Aims;

- To achieve a continuing overall improvement in the quality of rivers, estuaries, and coastal waters, through the control of pollution.
- To manage water resources to achieve the right balance between the needs of the environment and those of the abstractors.
- To provide effective defence for people and property against flooding from rivers and the sea.
- To provide adequate arrangements for flood forecasting and warning.
- To maintain, improve and develop fisheries.
- To develop the amenity and recreational potential of inland and coastal waters and associated lands.
- To conserve and enhance wildlife, landscape, and archaeological features associated with inland and coastal waters of England and Wales.
- To improve and maintain inland waters and their facilities for use by the public where the NRA is the navigation authority.
- To ensure that dischargers pay the costs of the consequences of their discharges and, as far as possible, to recover the costs of water environment improvements from those who benefit.
- To improve public understanding of the water environment and the NRA's work.
- To improve efficiency in the exercise of the NRA's functions and to provide challenge and opportunity for employees and show concern for their welfare.

Our strategic objectives

Plan:

- To plan for environmental sustainability and improvement through an integrated approach to river catchment management.

Act:

- To protect and regulate the water environment and its various uses by achieving agreed standards and objectives.

- To identify and ensure implementation of balanced, lasting and cost-effective solutions to environmental problems.
- To provide customers with advice, information and incentive to influence behaviour and mitigate or prevent environmental damage.
- To use collaboration, partnership and consultation with others to further NRA objectives and make best use of available resource.

Review:

- To assess and report on the state of the water environment and our success in ensuring its sustainable use.

Our key business themes

- Protect and improve the water environment;
- Provide integrated solutions;
- Deliver value for money.

Our key values

- Focus on results;
- Teamwork and trust.

Our key priorities

- Pursue the achievement of our Mission and Aims;
- Improve the water environment in an integrated way through catchment management planning;
- Improve our efficiency through market testing;
- Deliver better Value For Money (VFM) and achieve savings targets;
- Help Government plan the Environment Agency.

Cross-functional priorities

We will continue to:

- Respond to pollution, flooding and other environmental emergencies;
- Implement our programme of catchment management plans;
- Advise planning authorities about the implications of planning applications affecting the water environment.

Priorities between core functions

For our core functions sponsored by the DoE, or part financed by grant in aid, our order of priority is:

- Water quality,
- Water resources,
- Fisheries,
- Conservation,
- Navigation,
- Recreation.

Flood Defence is sponsored by MAFF/WO and is financed by local authority levies and MAFF/WO capital grant

Priority Projects

Figure 10 lists those projects and initiatives which we consider to have priority during this plan period and to which we will commit resources during 1995/96.

All of these initiatives are subject to rigorous business justification and we will continuously monitor progress and use of resources to ensure their completion without major impact upon our core activities.

Figure 10 - Our Programme of National Priorities and Projects

APPROVED AND MUST COMPLETE 1995/96

MULTI FUNCTIONAL

ENVIRONMENT AGENCY	<ol style="list-style-type: none"> 1. NRA input to Agency planning 2. Sustainable Development 3. Self Monitoring (Also Water Quality priority) 4. Contaminated Land / Abandoned Mines (Also Water Quality priority)
MARKET TESTING	<p>Implementation of 1994/95 strategic options reviews as approval given by Board for:</p> <ol style="list-style-type: none"> 1. Marine Survey Vessels 2. River Corridor Surveys 3. Hydrometry 4. Administration 5. Internal Audit 6. Board and Committee Services 7. Personnel 8. External Affairs 9. Public Relations 10. Legal 11. Estates 12. Information systems
PERSONNEL	<ol style="list-style-type: none"> 1. Job Evaluation implementation 2. Performance related pay 3. EU H&S Directives (via National Service)
IS	<ol style="list-style-type: none"> 1. Implementation of Information Systems re-organisation 2. Integrated Accounting System (Finance) 3. Personnel and Payroll System (Personnel and Finance) 4. Water Archive and Monitoring System (WQ and WR)
OPERATIONS	<ol style="list-style-type: none"> 1. River Severn (Wem) incident lessons

CORE FUNCTIONS

WATER QUALITY	<ol style="list-style-type: none"> 1. Implementation of AMP2 2. SWQOs (subject to DoE approvals) with CMPs. 3. Existing EC Directives monitoring / reporting 4. Implementation UWWT Directive - consents review 5. National monitoring work (GQA schemes / 1995 quinquennial survey)
WATER RESOURCES	<ol style="list-style-type: none"> 1. Development Strategy (sub projects for review of local options, environmental requirements study and strategic option environment baseline studies) 2. National Centre Projects 3. Water Level Management Plans - (priority sites to be completed)
FLOOD DEFENCE	<ol style="list-style-type: none"> 1. Strategic review of contracts 2. In House Work Force review
FRCN	<ol style="list-style-type: none"> 1. Conservation criteria and classification 2. River rehabilitation (existing LIFE projects only) 3. Boat safety scheme 4. Navigation harmonised charging scheme 5. National review of Net Limitation orders 6. Implementation of Net Licence Duties

"Approved and must complete" projects are considered to be fundamental to the NRA/Environment Agency and must be implemented during 1995/96. We will commit resources to these projects to ensure their implementation within timescale and budget.

PROGRESS TO NEXT APPROVAL STAGE IN 95/96/97

MULTI FUNCTIONAL

MARKET TESTING	<p>Progress in 95/96 to strategic options study only for</p> <ol style="list-style-type: none"> 1. Water Quality Activities 2. Water Resources Activities 3. Flood Defence Activities 4. Fisheries Activities 5. Recreation and Conservation Activities 6. Finance Activities 7. Market Testing Unit 8. Corporate Planning 9. Catchment Management Plans <p>For 96/97 and onward see Figure 90 on page 63.</p>
PERSONNEL	<ol style="list-style-type: none"> 1. Revised Car Policy (our proposals are currently awaiting DoE and Treasury approval. The policy will be fully implemented as soon as this is granted and resources are available)
IS	<ol style="list-style-type: none"> 1. Electronic Mail (E-Mail) 2. National Incidents and Prosecutions System (NIPS) 3. National Abstraction Licensing Database (NALD) 4. Flood Defence Management System (FDMS) 5. National Planning Applications System (NPAS) 6. Flood Defence S.105 7. WQ Sampling Programme Management System 8. Corporate Planning Management Information System (CP MIS)
OPERATIONS	<ol style="list-style-type: none"> 1. Pollution Incidents 2. Oil spill response 3. Risk assessment (SPACE) 4. Lone Worker Alarm 5. Video Conferencing

CORE FUNCTIONS

WATER QUALITY	<ol style="list-style-type: none"> 1. National WQ monitoring project (other sub projects) 2. EC Directives (new / amended)
WATER RESOURCES	<ol style="list-style-type: none"> 1. Groundwater Yield Methodology 2. Licence Determination Technical Procedures
FLOOD DEFENCE	<ol style="list-style-type: none"> 1. Weather Radar Group 2. Flood Warning NRA / Police / Local Authority roles 3. Flood Defence Manual 4. Circular 30/92 5. Water Level Management Plans / Coastal Zone Management Plans (in conjunction with CMPs)
FRCN	<ol style="list-style-type: none"> 1. Anti-poaching review 2. Charging for fisheries services 3. Byelaw review - 2 rods, etc. 4. Review of recreation policy in coastal zones 5. Wetland policy

"Progress to next approval stage" projects will have definitions and business justifications prepared, but will not undergo any major development work. In some cases we may begin pilot implementation, but this will be dependent upon availability of resources. By committing minimal resources to these projects we will ensure continued delivery of our core operations.

CHAPTER 3 - PERFORMANCE AGAINST STRATEGY AND LAST PLAN

Organisational Developments

During 1994/95 the NRA has seen the process of merging the former South West and Wessex, and Northumbria and Yorkshire regions continuing. An area based management structure across all 8 regions has now bedded down and the implementation of NRA catchment management plans is now underway. The Authority has also been awarded a Citizen's Charter Mark for the quality of its public services by the Prime Minister.

1994/95 has also seen the creation of a National Information Systems service comprising corporate services, systems development and technical services. The National Laboratory Service which was created last year has focused on improving its services. The National Health and Safety Service has continued to develop apace, and increased resources are to be allocated to the National Training and Development Service. A new National R&D Service has been created and the work of the Environmental Policy Unit has increased. Environmental auditing procedures have been developed and have been tested on two NRA sites.

As a result of the NRA's market testing programme, our Project Engineering Services, and Transport and Mobile Plant Maintenance services have been outsourced. Following a review of possible options, a number of efficiencies are being introduced to our Committee Services and Personnel functions. The NRA's internal audit service won a full market test against the private sector.

During 1994/95 the DoE has seconded the NRA's Director of Water Quality and Chief Scientist, and Director of Personnel to help with Environment Agency planning.

Operational Achievements

This section is concerned with the achievement of our Mission and Aims since the vesting of the NRA. We are pleased to be able to present the long term performance trends in figures 11 to 48 which reflect the achievements and influence of the NRA. In these figures 1994/95 data is:

- Budget data for graphs of financial trends,
- Actual data for graphs of staffing trends (all of which show complemented posts only for consistency through the time series),
- Forecast data for all other graphs.

Figure 49 shows some examples of on the ground achievements in 1994/95.

Water Quality

Figure 11 - Major Pollution Incidents

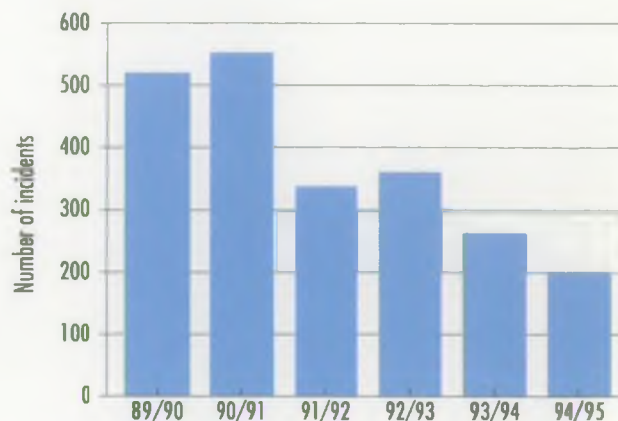


Figure 12 - % Discharge Consents Determined in Statutory Period

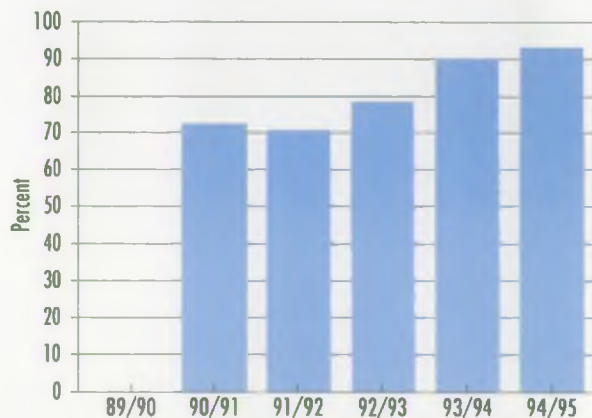


Figure 13 - River Quality by GQA Class

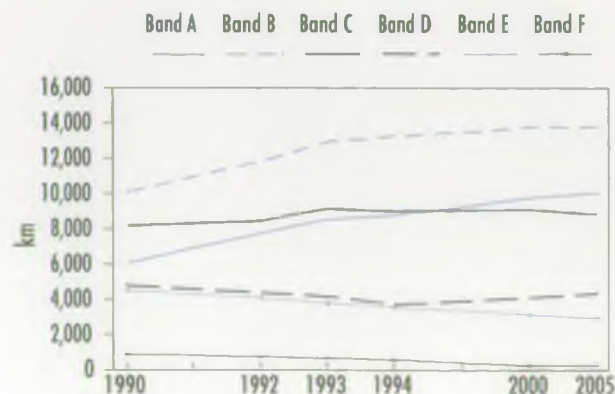


Figure 14 - Bathing Waters Compliant with EC Directive

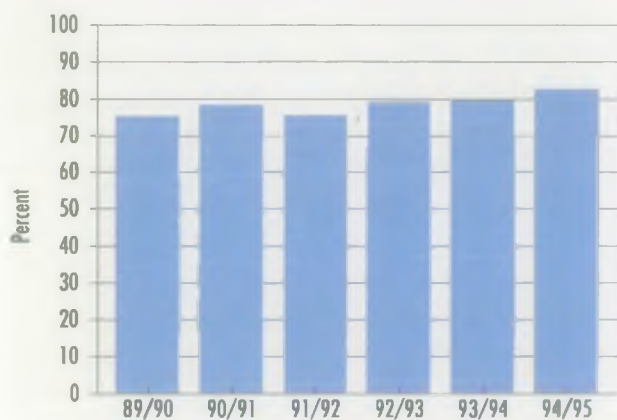


Figure 17 - Fines for Pollution Incidents

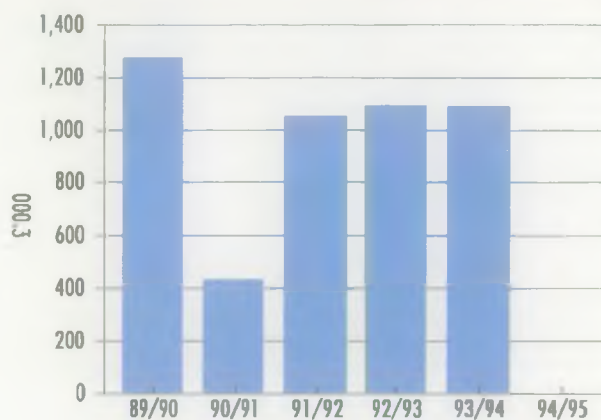


Figure 15 - Number of Public Register Enquiries

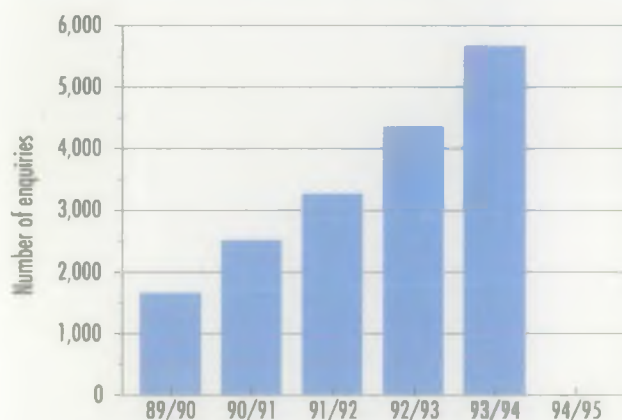


Figure 18 - Water Quality Expenditure

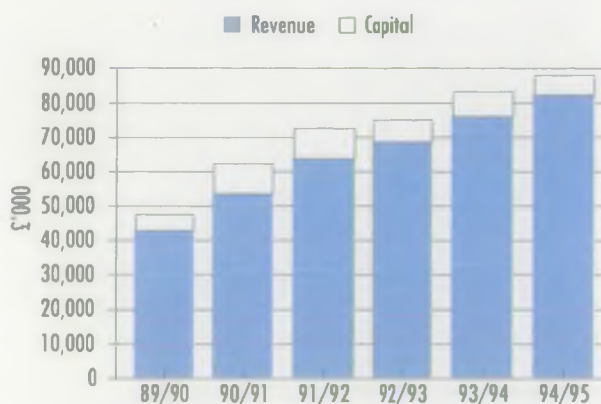


Figure 16 - Number of Prosecutions for Pollution

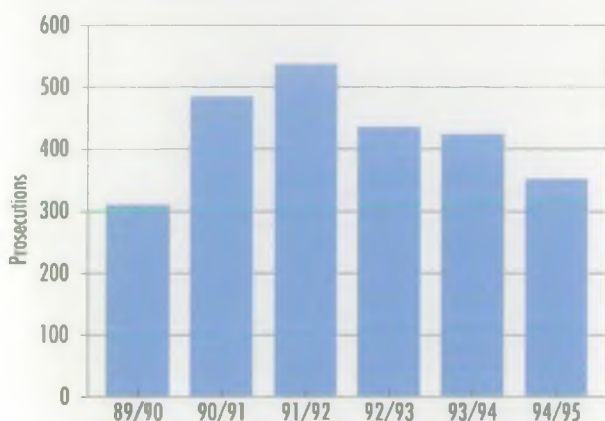


Figure 19 - Income from Charging for Discharges

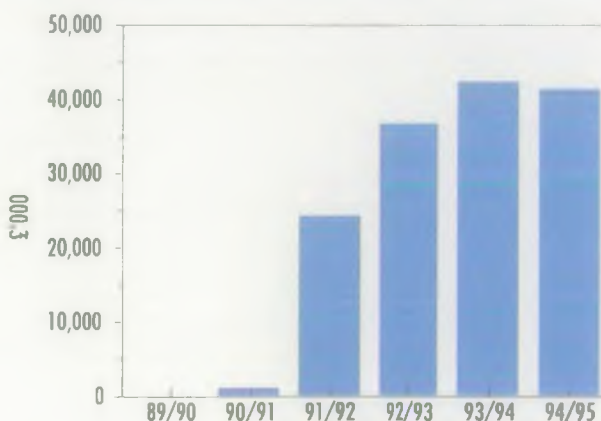


Figure 20 - Water Quality Staffing (excluding laboratories)

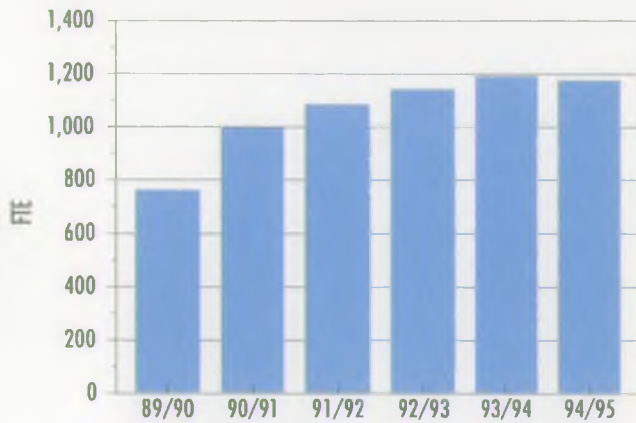
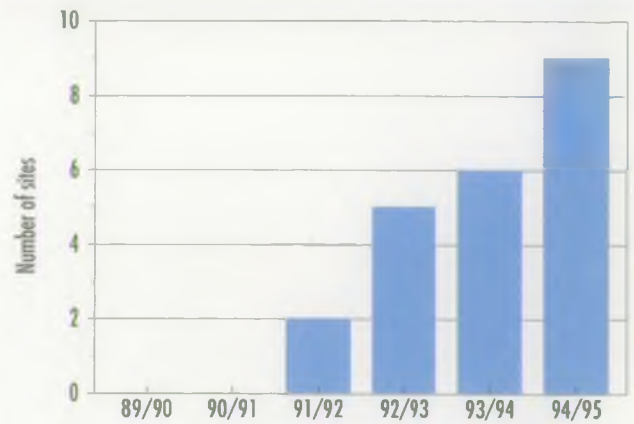


Figure 23 - Cumulative Number of Sites With Low Flow Solutions



Water Resources

Figure 21- Abstraction Licences Determined in Statutory Period

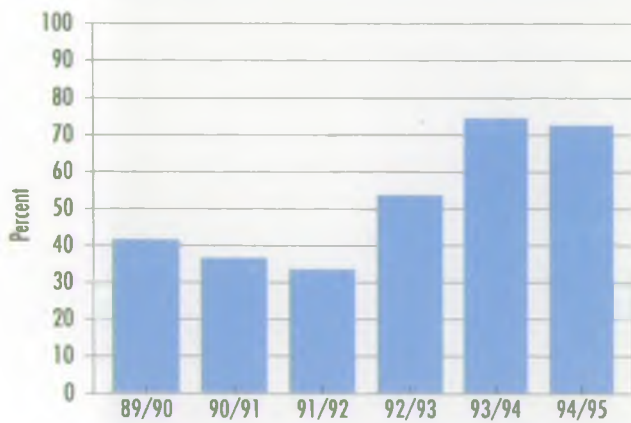


Figure 24 - Water Resources Expenditure

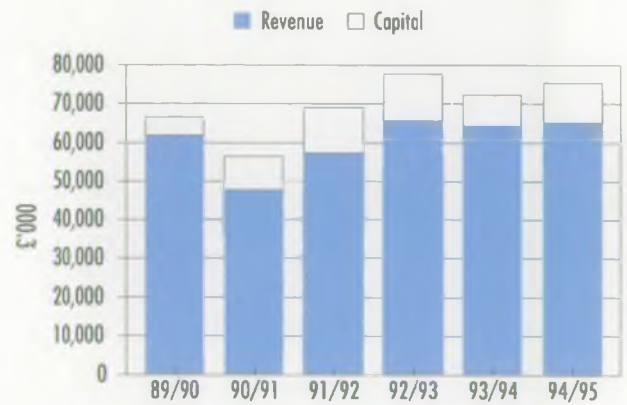


Figure 22 - Number of Abstraction Licence Inspections

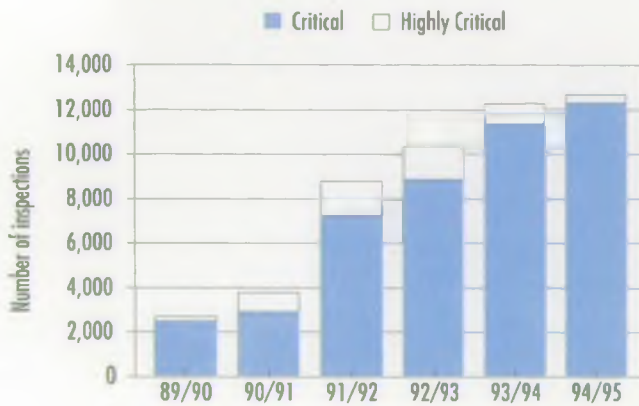
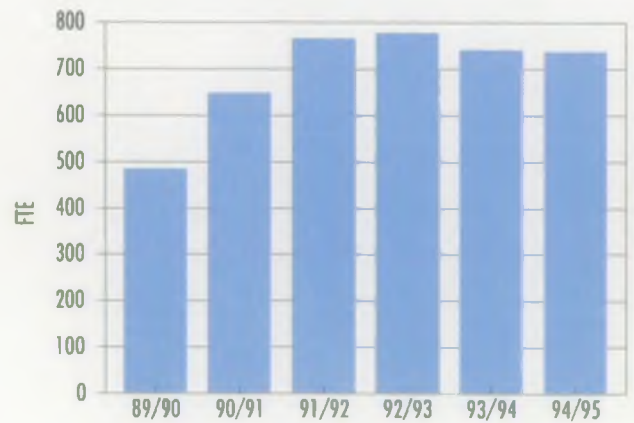


Figure 25 - Water Resources Staffing



Flood Defence

Figure 26 - Length of Flood Defence Maintained

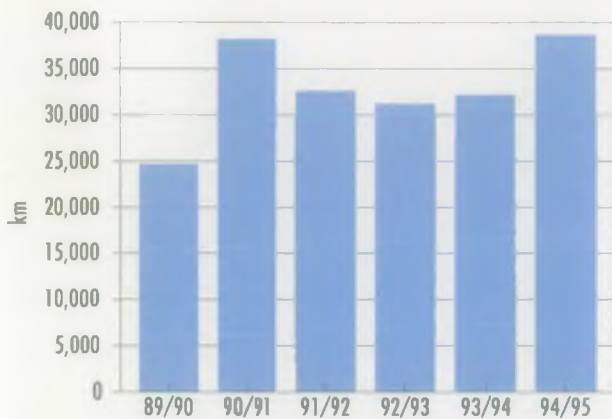


Figure 27 - Flood Defence Expenditure

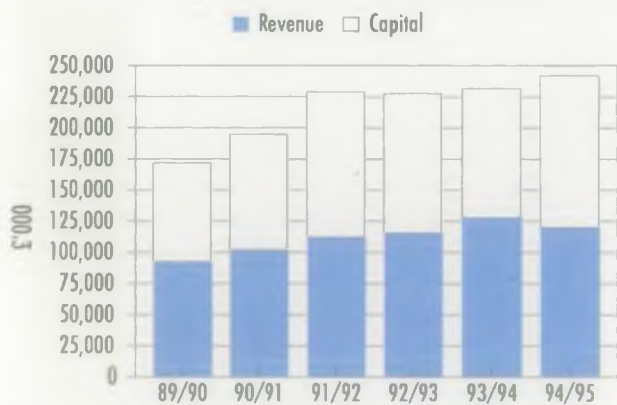
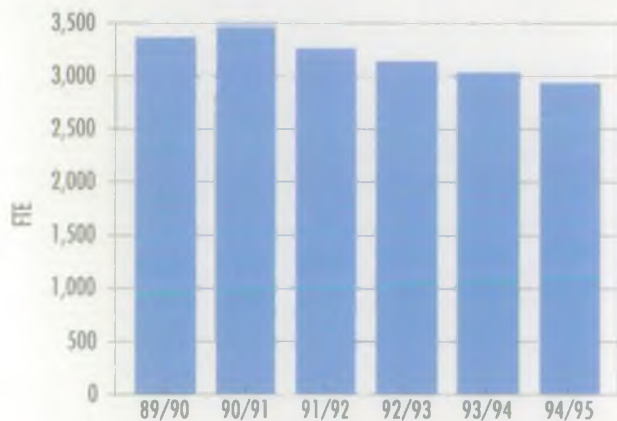
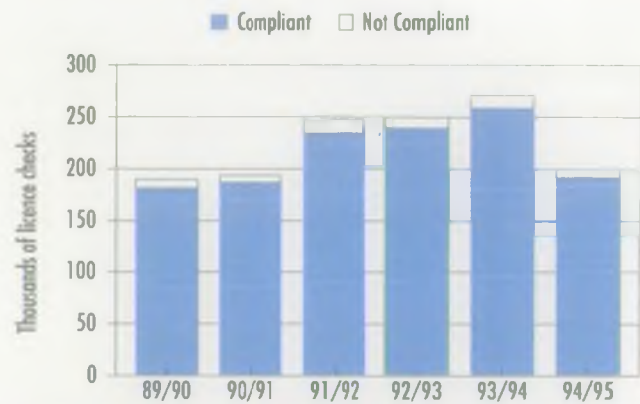


Figure 28 - Flood Defence Staffing



Fisheries

Figure 29 - Angling Licence Inspections



From 1995 onward we do not count multiple checks of the same licence

Figure 30 - Successful Fisheries Prosecutions

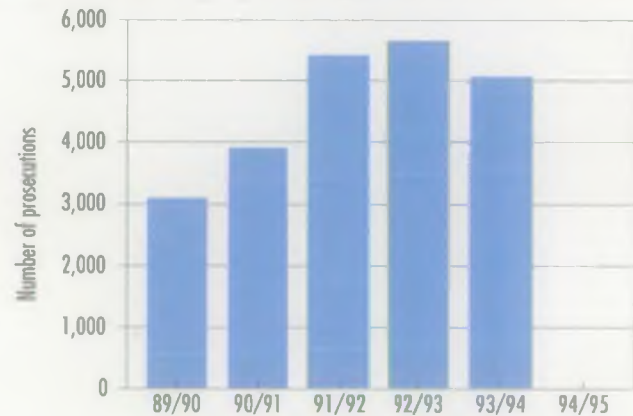


Figure 31 - Number of Fisheries Improvement Works

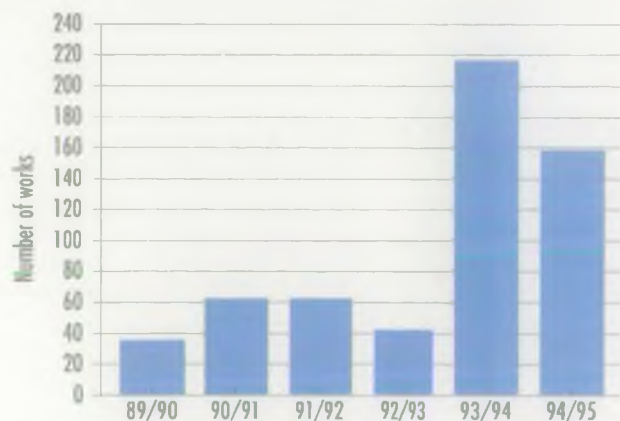


Figure 32 - Numbers of Fish Stocked

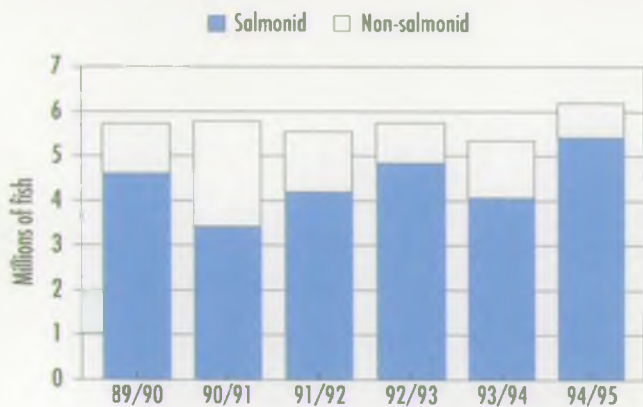
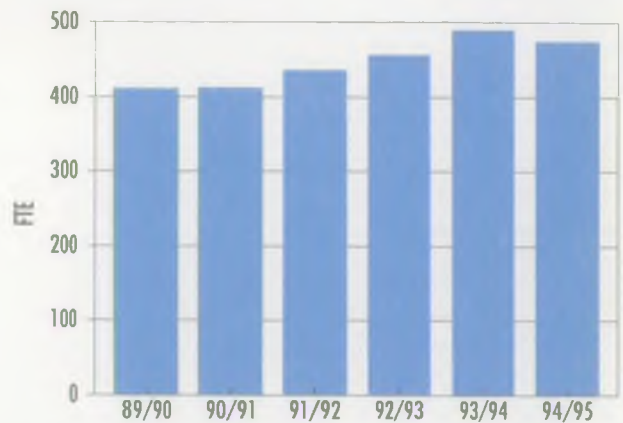


Figure 35 - Fisheries Staffing



Conservation and Recreation

Figure 33 - Fisheries Income

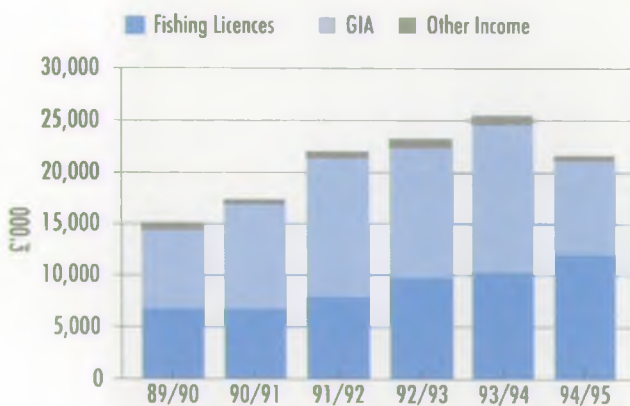


Figure 36- Collaborative Projects

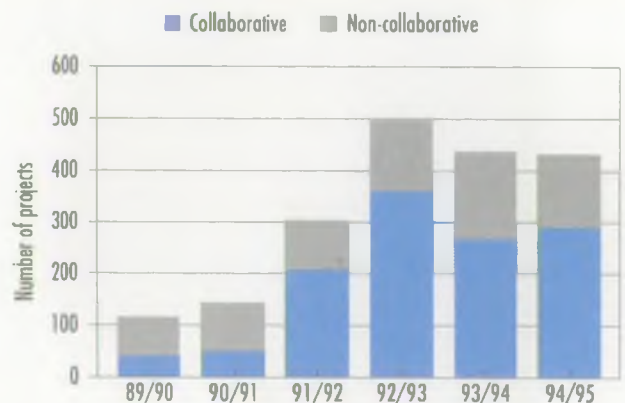


Figure 34 - Fisheries Expenditure

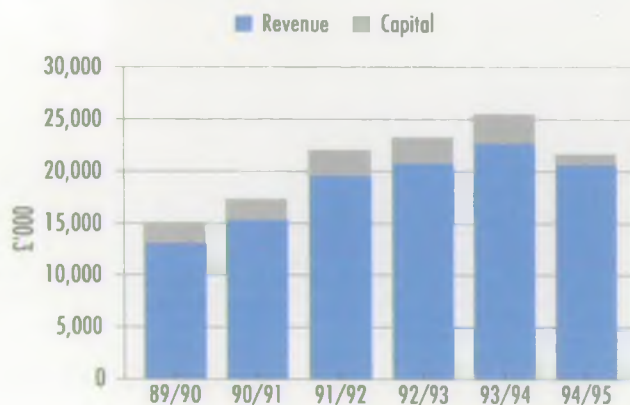


Figure 37 - Conservation and Recreation Income

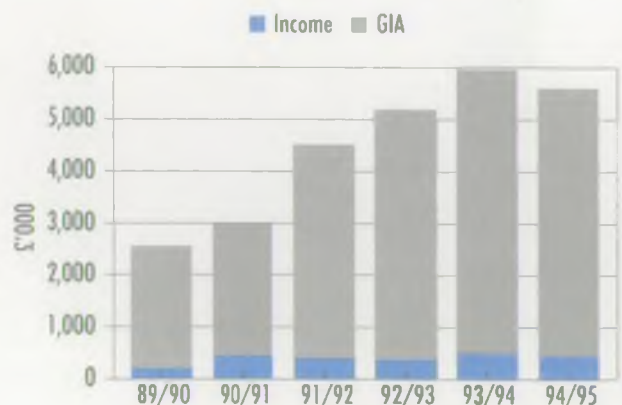


Figure 38 - Conservation and Recreation Expenditure

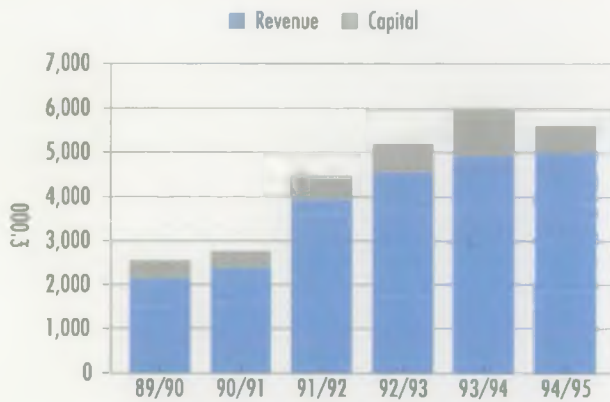


Figure 41 - Navigation Licence Offences

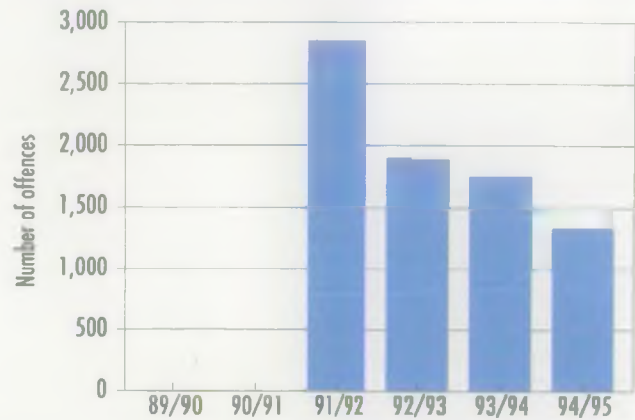


Figure 39 - Conservation and Recreation Staffing

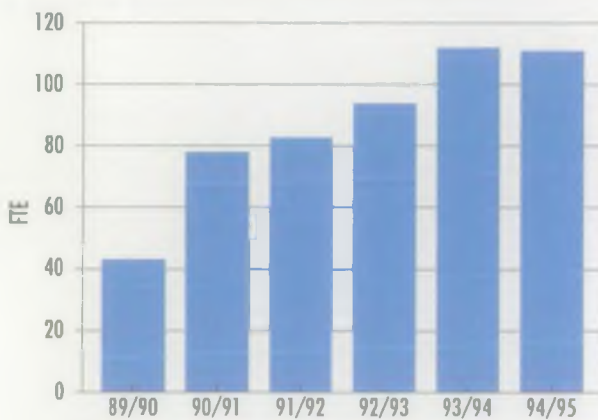
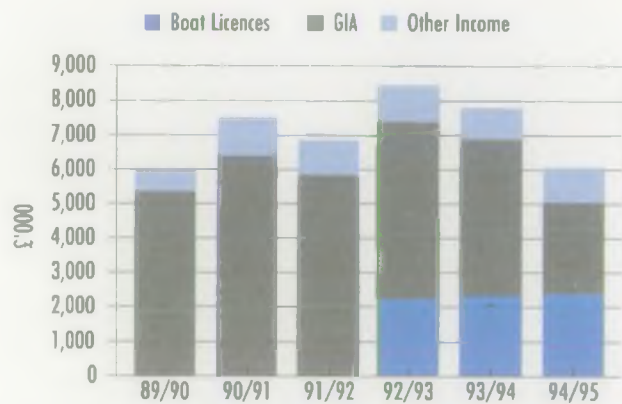


Figure 42 - Navigation Income



Navigation

Figure 40 - Navigation Licence Inspections

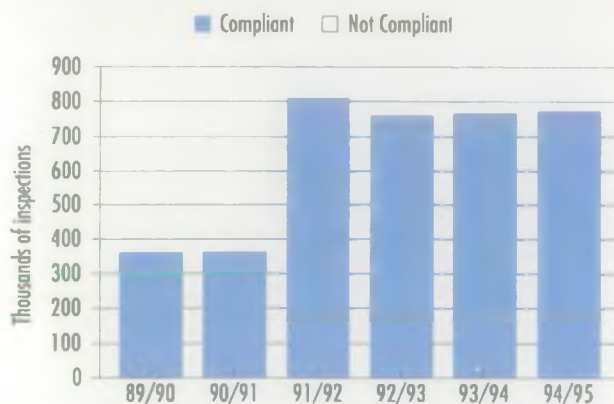


Figure 43 - Navigation Expenditure

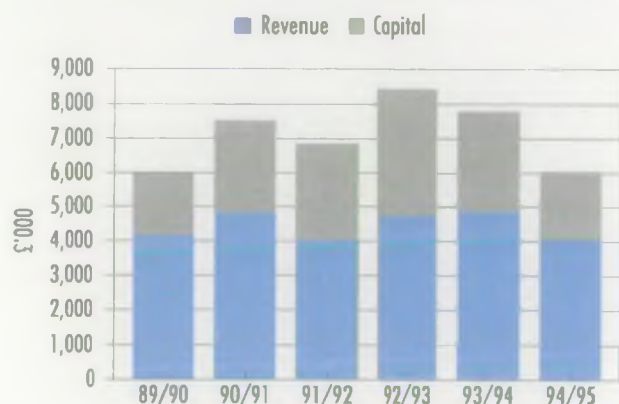


Figure 44 - Navigation Staffing

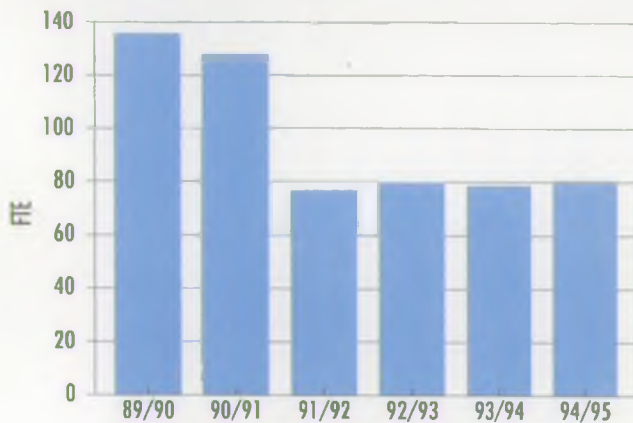
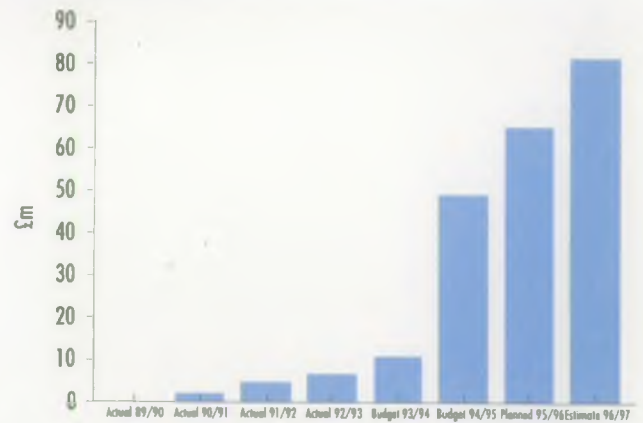


Figure 47 - Efficiency Savings



General

Figure 45 - Total Income and Expenditure

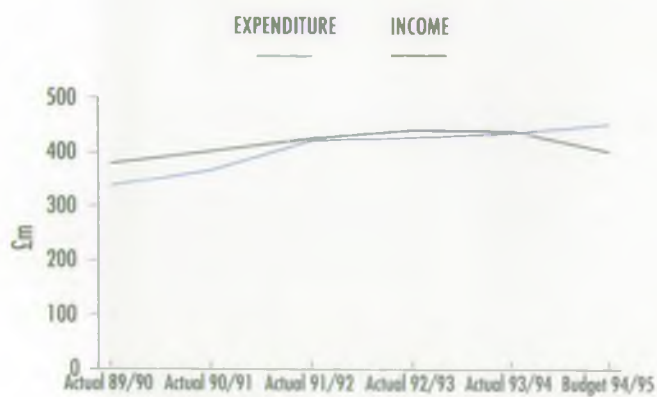


Figure 48 - Total Staffing

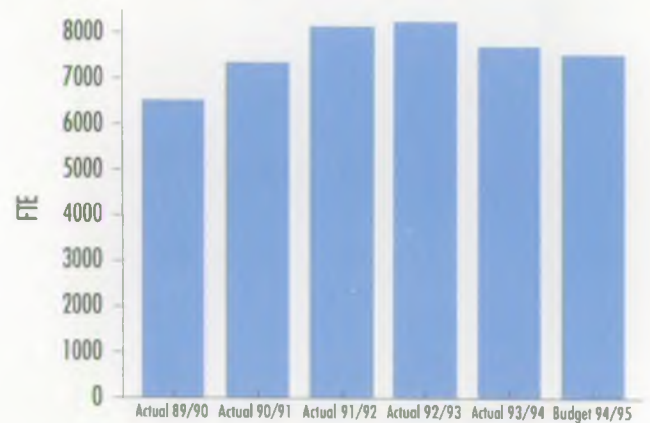


Figure 46 - % Contribution of Government Grants

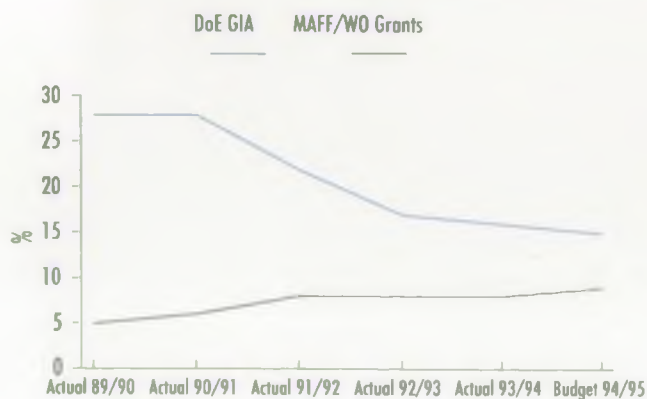


Figure 49 - Examples of On The Ground Achievements in 1994/95



- 1 Low flow solution identified for River Wharfe at Otley.
- 2 Two automatic fish counters installed on River Wear.
- 3 Water Quality improvements in the River Don.
- 4 Emergency plan for Bassenthwaite Lake agreed and tested.
- 5 Waste minimisation initiatives sponsored, attracting EC funds.
- 6 Appointed as Environmentally Competent Body for Merseyside Objective 1.
- 7 Major sea defences completed at Dinas Dinlle.
- 8 Wetlands restoration at Malltreath Marsh (RSPB approved).
- 9 Regional Water Resources consultation document produced. Significant influence achieved in targetting water plc's AMP2 investment programme to achieve maximum environmental benefits. (In common with several other regions).
- 10 River Stour improved by controls on moth-proofing agent discharges at Kidderminster STW.
- 11 Completion of Yoxall gauging station.
- 12 Completion of Calverton fish farm expansion.
- 13 First four offshore flood defence reefs completed along Happisburgh-Winterton frontage.
- 14 River Slea low flow solution implemented.
- 15 Instream habitat enhancements in River Cam catchment.
- 16 Overall regional improvement in water quality.
- 17 Maidenhead, Windsor and Eton flood alleviation scheme approved.
- 18 Regional planning guidance initiatives and several emergency planning exercises.
- 19 Completion of Felpham sea defence works.
- 20 Increased control over paper mill discharges into Kent watercourses.
- 21 Re-introduction of otters to River Itchen, by creating new habitats, safe havens and road crossings.
- 22 Water quality and fisheries improvements in Axe, Otter and Teign - success of pollution task force inspections.
- 23 Barbican flood defence scheme completed at Plymouth.
- 24 Fisheries habitat improvements in North Wessex.

Progress Against Our Savings Programme

Indicative progress against our four year savings programme, as set out in our 1993/94 Corporate Plan, is given in figure 50 (the savings targets are shown in figure 98 on page 72). Further details of the achievement of specific targets for each core function are given in later sections of this plan.

As required by the 1991 Water Resources Act and the NRA's Financial Memorandum, full details of our performance against the targets in our last Corporate Plan will be reported in our 1994/95 Annual Report and Accounts.

Figure 51 details the achievement of our priorities as set out in our 1994/95 Corporate Plan. It shows progress against our "Must Do" and "Progress" projects. "Must Do" projects were given high priority in 1994/95, and resources were committed to ensure their delivery or development during 1994/95.

"Progress" projects were given lower priority and were developed only up to the point where more resources would be required for completion.

Figure 50 - Progress Against Our Efficiency and Savings Programme

Activity	1993/94 Savings		Further Savings in 1994/95†		Cost to date	Cumulative Net (Cost) / Saving	
	£m	FTE	£m	FTE		£m	FTE
Superannuation changes	-	-	3	-	-	3	-
Procurement	-	-	2	-	-	2	-
Information Systems	-	-	2	23	-	2	23
Value for money initiatives	-	9	2	5	-	2	14
Fisheries	-	-	1	-	-	1	-
Revised flood defence spend	-	-	20	-	-	20	-
Management performance targets	-	-	8	-	-	8	-
Manpower control adjustments	4	261	1	-	-	9	261
Regional Mergers	1.5	96	3.5	103	5	1.5	199
Regional Restructuring	0.5	34	3.5	110	3	1.5	144
Market testing	1	353	7	209	10	(1)	562*
Additional GIA - savings from 93/94 PES	-	-	1	-	-	1	-
TOTAL	7	753	54	450[□]	18	50	1203

† Further monetary savings in 1994/95 are in addition to the continued effects of 1993/94 savings. The total net saving of £50m consists of £7m saved in each of 1993/94 and 1994/95, £54m saved in 1994/95 and costs of these initiatives totalling £18m to date.

* Breakdown of posts saved resulting from Market Testing: Rationalisation of Laboratories 103, contracting out Project Engineering Systems 145, contracting out Transport and Mobile Plant Maintenance 70 and reductions in the In-House Work Force 244.

□ The 450 posts 'saved' in 1994/95 through these initiatives have not all resulted in reduced NRA staffing. Some were redeployed to maintain or improve the delivery of our core services. Total NRA staffing was reduced by 372 posts during the year.

Figure 51 - Progress On Our National Priorities and Projects

"Must Do" Projects	Progress
MULTI-FUNCTIONAL	
1. Environment Agency	Continued to provide support to Government, input to the legislative process and full involvement in all sub-groups.
2. Market Testing	Strategic options reviews completed to programme. Internal Audit successfully tendered against outside competition.
WATER QUALITY	
3. WQOs	Government approval that draft proposals for SWQOs to proceed on a pilot basis in 8 catchments.
4. Integrated Pollution Control	Continued liaison with HMIP over IPC and related matters.
5. NAO - Farm Pollution (includes bringing forward Farm Waste Strategy)	Full input to NAO study and leaflets on farm waste and farm management plans published.
6. Harmonised Water Quality Monitoring	Achieved outputs from project plan including development and implementation of sampling manual and monitoring manual, planning for the 1995 Survey and reviewing and reducing GQA monitoring.
WATER RESOURCES	
7. Water Resources Development Strategy	Work continued on the economic level of demand management and the environmental acceptability of resource development options.
8. Surface Water Yield Methodology	Implementation group established. Now on hold due to competing priorities.
9. River Flow Objectives	Interim report delayed to March 1996.
FLOOD DEFENCE	
10. Flood Defence Management Systems (also an IS project)	Draft manual produced and summary guide developed. Business needs review underway for computerised system.
11. Emergency Response Policy - Levels of Service	National levels of service agreed and methodologies developed. Final implementation dependent on resource availability.
FRCN	
12. Fisheries Finance Strategy	Review approved by the Board and implementation underway.
13. Navigation Finance Strategy	Navigation activities review completed. Action plan being progressed.
14. Conservation Criteria and Classification	River Habitat Survey methodology approved and national site network established.
FINANCE	
15. Standards of Service (Citizen's Charter elements only)	Completed and implemented via revised Customer Charter in January 1995.
INFORMATION SYSTEMS	
16. Water Archive and Monitoring System (WAMS)	Contract for system awarded. Implementation in 1995/96.
17. Integrated Accounting System (IAS)	Pilot implementation undertaken.
18. National Abstraction Licensing Database (NALD)	Business case and pilot implementation approved.
19. IS Infrastructure (Planning)	Completed.
20. Flood Defence Management System (FDMS) (also a FD project)	Business case developed.
21. Office Systems - E-Mail	Business case approved for pilot implementation in 1995/96.
PERSONNEL	
22. Personnel Policies and Procedures	Various policies revised during year including agreement to changes in Terms and Conditions for the In-House Workforce.
23. Job Evaluation	Completed on target with appeals determined.
24. EC Health & Safety Policies and Training	Training courses undertaken and revised policy manual published.

"Progress" Projects

Progress

WATER QUALITY

- | | |
|--|--|
| 1. Oil Spill Response | Liaison arrangements established with British Oil Spill Clean-up Association. National contract for clean-up arrangements established. |
| 2. Contaminated land / abandoned mines - preparatory work only | Legislative changes have been secured in the new Environment Bill. Memorandum of Understanding drawn up with the Coal Authority and major operators. |

FLOOD DEFENCE

- | | |
|---|---|
| 3. Maintenance Manual | Manual produced under umbrella of FDMS project. |
| 4. Flood Defence Needs Identification - Standards of Service (implement by 12/95) | Surveys underway in all regions. Full implementation dependent on FDMS timetable. |
| 5. Development Control - Development in Floodplain Policy | Policy developed and undergoing internal consultation. |

FRCN

- | | |
|---|--|
| 6. Site management and collaborative projects | Site management methodology developed, to be pilot tested in 1995/96. |
| 7. Review of Net Limitation Orders | National project group established. NLOs advertised for Anglian and Welsh regions. |
| 8. Review of Fisheries Enforcement | National project group established. |
| 9. Migratory Fish Management Plan | Draft salmon management strategy consulted on. |
| 10. Fisheries Byelaw Review | Modified coarse fish close season byelaws introduced in March 1995. |
| 11. River Rehabilitation | Board approval given for establishing the NRA as principal partner at two EC LIFE demonstration sites in England. |
| 12. Review of Net Licences | Public consultation completed. Results presented to National Fisheries Committee and recommendations to be presented to the Board. |
| 13. Boat Safety Scheme | Developed in partnership with British Waterways. |

INFORMATION SYSTEMS

- | | |
|--|--|
| 14. National Planning Applications System (NPAS) - business case | Progressed, now put on hold due to competing priorities. |
| 15. Geographic Information Systems (GIS) - feasibility study | Progressed and now brought under the WAMS project. |
| 16. Personnel & Payroll | Project developed and is now a "must do". Procurement process completed, full implementation in 1995/96. |

CHAPTER 4 - EXTERNAL INFLUENCES AFFECTING OUR PLANNING

International

The implementation of recommendations on Sustainable Development and Biodiversity from the UN Conference on the Environment and Development held in Rio, Brazil in June 1992 is of increasing significance to environmental management across Europe, in the UK, and throughout the rest of the world. In particular we recognise the likely future importance of increased State of the Environment reporting and the development of environmental accounting.

The NRA is committed to the principles of Sustainable Development and is represented on the Government's Sustainable Development Round Table. We will support the implementation of the programme of those actions set out in Agenda 21 in which the group has a locus.

For example, at an international level the NRA will continue to play an active role in the work of the various groups concerned with the environmental status of the North Sea and Irish Sea. These will seek further improvements in river, estuary and coastal water quality, and in migratory fish populations in coastal waters around England and Wales.

We will also continue to entertain overseas visitors seeking our advice and foster such relationships. This enhances both the NRA's and the country's reputation abroad, benefiting our economy. Further promotional and development work, costing about £0.25m, if funded by Government and carried out within Government guidelines, would develop our staff and aid British business overseas.

European Union

The Secretary of State for the Environment recently estimated that 80% of UK environmental policy is determined by European Community policy. For example the implementation of the EC 5th Environment Action Programme 1993-2000, new and revised EC directives on the environment as well as on other topics, and ERDF and LIFE programmes are of growing significance to us.

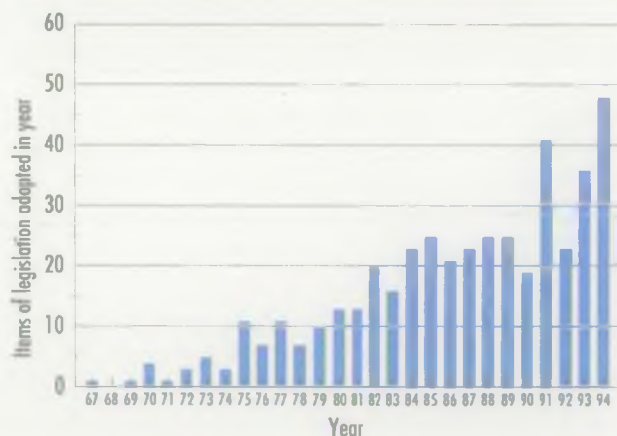
The NRA is already the Competent Authority for some 20 EC Environmental Directives including:

- Dangerous Substances
- Titanium Dioxide
- Asbestos Pollution
- Nitrates
- Surface Waters
- Groundwater Protection
- Bathing Waters
- Shellfish Waters
- Urban Wastewater

- Freshwater Fisheries
- Habitats (with other bodies)

HMIP and the WRAs will add another 7 to this list initially upon the creation of the Environment Agency. We estimate that a further 13 new or amended Directives or measures may affect the Environment Agency in subsequent years including the Ecological Quality of Freshwaters and Integrated Pollution Prevention and Control (IPPC). These will require additional GIA in 1996/97 and later years as our environmental monitoring procedures and IS needs will be modified.

Figure 52 - Increase in EC Environmental Measures



We are increasingly seeking to take a more active role in the drafting processes for EC Environment Directives. We will do this by offering the DoE and EC a highly specialised advisory role as a practitioner in the critical stages of drafting legislation. This legislation includes the series of proposed framework Directives which will review the application of the present Surface Water, Groundwater and Bathing Water Directives, which will be key areas where technical expertise within the NRA can be utilised.

Turning to environmental monitoring, we very much welcome the creation of the Copenhagen based European Environment Agency and the priority it has given to marine and freshwaters in its first work programme, and we are an active member of the UK national network on water management. We are also working closely with the European Environmental Regulators' Club (IMPEL).

We are currently involved in a number of EC funded environmental improvement and R&D projects in partnership with other organisations, including those on the River Pelenna, Redgrave and Lopham Fen, etc.

Figure 53 - Examples of Collaborative Projects Attracting EC Funding During 95/96 and 96/97

Project Name	Leading Partner	Project Costs (£k)	NRA Contribution	EC Funding
Restoration of River Peleenna	Welsh Development Agency	607	40	256
River Corridor Countryside Management - Kent	Kent County Council	76	10	38
Redgrave and Lopham Fen Alleviation	NRA, Suffolk Wildlife Trust and Essex & Suffolk Water (Equal Partners)	1675	450	650
Restoration of Norfolk Broads	Broads Authority	112	49	63
Toxicity Criteria	WRC Plc	328	39	164
Pesticide Analysis	WRC Plc	363	28	182
Bio-manipulation	Broads Authority	291	25	186
Functional Analysis of European Wetland Ecosystems	Royal Holloway and Bedford College	912	20	456

We support Government policy in respect of additionality over the receipt of ERDF grants from Europe, and we are actively investigating the scope of, and new opportunities for, collaborative projects with other organisations at the local, regional, national and international level.

UK Government and the Environment Agency

By far the most important issue for the NRA is the Environment Bill currently in Parliament, which aims to create a new Environment Agency for England and Wales to protect and enhance the environment. This will merge the NRA, HMIP and Waste Regulatory Authorities. We welcome the Environment Agency and we are strongly committed to participating in its planning through the Environment Agency Advisory Committee (EAAC), the Consultative Group for the Environment Agency (CGEA) and in close liaison with HMIP and Waste Regulatory Authorities.

We have also welcomed public statements by Government confirming their intention to include all the operational functions of the NRA in the Agency, and the importance of maintaining integrated catchment management. We look forward to the possible development and introduction of new economic instruments and the challenge of fitting these into new patterns of regulation.

Planning for the Environment Agency will become an even more important activity for us in 1995/96, than it has already been in 1994/95. In preparing this Plan we have been mindful that our 1995/96 budget and spending plans for 1996/97 will, with figures from HMIP and the WRAs, form the baseline plans of the Environment Agency. We have begun to discuss corporate planning and reporting processes and systems with HMIP and the WRAs and assisted the EAAC in the preparation of a preliminary Corporate Plan and 1995 PES submission.

The establishment of the Environment Agency through the

merger of NRA, HMIP and WRAs will result in some additional costs during 1995/96 and subsequent years. The creation of the NRA resulted in capital restructuring costs of £85m on new offices, laboratories, corporate identity and IS adjustments. Clearly this investment in the NRA will not need to be repeated. However one-off setting up costs in 1995/96 and other transition costs in future years will be required on project management, schemes of transfer, new corporate identity, recruitment, training, office accommodation, IT and telecommunications, staff buyouts and severance. Such expenditure should lead to longer term savings, from economies of scale (eg reduction of duplicated administration) and improved communications as the Agency becomes a 'one-stop' contact for environmental issues. We have, however, omitted such expenditure from our Plan, as it is being submitted to Government by the EAAC in its own Corporate Plan.

We are pleased that the draft Bill contains a principal aim for the Agency on sustainable development. As well as being committed to the principles and actions in the UK's Sustainable Development Strategy and Bio-Diversity Action Plan, we are also supportive of the DoE publication on using market based instruments to obtain environmental improvements. We look forward to the creation of the Environment Agency to help further progress the strategy and action plan, and to the possible introduction of new tools such as incentive based charging to help improve the environment, to sit alongside other existing statutory measures such as Water Quality Objectives (WQOs), Water Protection Zones (WPZs) and Minimum Acceptable Flows (MAFs).

We will continue to support Government initiatives to improve our public services through initiatives such as Citizen's Charter, Competing for Quality, Open Government and De-regulation.

UK Economy and Inflation Assumptions

In producing this Plan we have been mindful of the state of the UK economy, the Government's unified budget and November

1994 PES statement, the price of goods and raw materials, underlying trends in inflation, and Government's public sector pay policy.

Annual PES provisions for the NRA have a major bearing on planning for all our functions. Since vesting in 1989 the NRA has received less GIA each year from the DoE as income has increased from our charging schemes, especially for discharges and fisheries. Increased capital grants from MAFF/WO have helped fund urgently needed improvements to flood defences.

This Plan assumes future levels of GIA and MAFF/WO capital grants, with TOC and TAC controls, as indicated in the November 1994 PES Statement. This reduced our GIA for DoE functions by £1m and MAFF grant for Flood Defence works by £8m.

The 1994 PES settlement for GIA and the flat profile of TOC and TAC figures did not make any allowance for inflation. Thus in addition to our own efficiency savings programme, which rises to 15% of annual expenditure, the Government has imposed further efficiency savings on the NRA equal to the Treasury's estimated general inflation rate over the plan period.

Any changes to our indicative grants for 1996/97 to 1998/99 as a result of the 1995 PES round will necessitate a re-evaluation of the priorities set out in this plan by the Environment Agency, and would cause it to either increase charges or reduce operational expenditure, affecting the quality of service to its customers and the environment. At a time when the Environment Agency will require additional resources to ensure that it can become effective as soon as possible, we strongly recommend against this course of action.

Production of This Plan

Initial work on producing this plan started in early 1994. The NRA's Board, Executive Group, Operations Team, Regional Committees, Functional Groups, Senior Managers and numerous other staff were involved in its formulation during 1994/95.

After reviewing last years corporate planning process and likely availability of resources the Chief Executive produced a set of general policy guidelines for the 1995/96 corporate planning process in October 1994.

A more detailed Forward Planning Brief, detailing key priorities from our core function and support service strategies and financial and staffing planning assumptions between 1995/96 and 1997/98, was issued to Head Office Directorates, National Services, National Centres and Regions during December, immediately after the Government's Budget and November 1994 PES statement.

Head Office Directorate, National Service and Centre and Regions' Corporate Plan submissions were then quality checked by the Chief Executive and Directors in January and February 1995 and 1995/96 operating budgets were approved by the Board in March 1995.

The Corporate Plan covering 1995/96 and later years was then drafted during March and April 1995. During April and May 1995 the contents of a draft Plan were edited after discussion by the NRA Executive and Board and following meetings with DoE, MAFF and the Welsh Office.

The contents of this plan fully reflect our long term corporate, core function and support service strategies, and the shorter term business plans and budgets of our Head Office Directorates, National Services and Centres, Regions and Areas which are used to set individual employees' performance objectives as part of our national performance appraisal process.

All expenditure figures in this plan are based on a November 1994 price base uprated to outturn prices each year to 1998/99 with the following adjustments:

- a general inflation factor of 3½% per annum for non-manpower costs. This is based on various published estimates and maintains a general consistency of financial planning with the assumptions in our last Corporate Plan.
- an overall manpower costs inflation figure of 3½% per annum based on average public sector pay settlements in 1994/95, and future predictions. The cost of pay awards for Senior Managers, NJSC staff and NJIC employees in 1995/96 will be funded from our efficiency savings programme. We will not exceed our total 1993/94 pay bill and will implement our new Performance Related Pay (PRP) policy. Employees will receive different rates of increase based on their performance. This is in full accordance with the Government's public sector pay policy.

In terms of resources the plan presents our 1995/96 budget, which has already been agreed with Government, and outlines our future spending plans in the Environment Agency between 1996/97 and 1998/99. These may be subject to amendment by the EAAC and Government during the 1995 PES round.

As required by Section Y of the NRA Scheme of Delegation, the plan was approved by the NRA Board in June 1995 for submission by the Chairman and Chief Executive to DoE, MAFF and Welsh Office Ministers. The plan will serve as an input to the 1995 Public Expenditure Survey to determine the NRA component of expenditure and indicative DoE and MAFF/WO grant ceilings for the years 1996 to 1998 for the Environment Agency.

CHAPTER 5 - CORE FUNCTION ENVIRONMENTAL PROGRAMMES

WATER QUALITY

Introduction

Details of our statutory duties and activities of the water quality function have been set out in our water quality strategy. Some of the key tools at our disposal include:

- Statutory WQOs and Water Protection Zones (WPZs),
- Farm pollution regulations,
- Pollution prevention campaigns,
- Issuing discharge consents to control pollution loads in controlled waters,
- Monitoring and reporting the status of water quality,
- Dealing with pollution emergencies and prosecution of polluters,
- Compilation of public register data on water quality to enable public access to environmental data,
- Charging for discharges cost recovery scheme to fund some of our water quality activities.

Aims and Objectives

Our aims are:

- To achieve a continuing overall improvement in the quality of rivers, estuaries and coastal waters through the control of pollution.
- To ensure that dischargers pay the costs of the consequences of their discharges and, where possible, to recover the costs of water environment improvements from those who benefit as well as those who pollute.

Our objectives are:

- To maintain waters that are already of high quality.
- To improve waters of poorer quality.
- To ensure that all waters are of suitable quality for the uses to which they are put.
- To prosecute polluters and recover the costs of restoration.
- To devise charging regimes that allocate the costs of maintaining and improving water quality fairly and provide incentive to reduce pollution.

Key Issues

Water Quality Objectives (WQOs)

The eventual replacement of the current system of informal river water quality objectives (WQOs) with statutory WQOs (SWQOs) remains a strategic aim for the maintenance and improvement of water quality in England and Wales. Our intention is to introduce SWQOs on a phased basis through our catchment management planning process. The classification regulations for SWQOs came into operation in May 1994, and an NRA procedural manual on SWQOs has been produced. An announcement, made on 7 February 1995, by the Secretary of

State for the Environment indicated that implementation would proceed on a pilot basis in the near future. The eight catchments for which draft proposals are being prepared are the Aire, Yarrow, Cleddau, Worcestershire Stour, Cam, Loddon, Test and Upper Bristol Avon. Wider implementation of SWQOs will depend on assessment of implementation procedures and practical operation in these catchments.

Water Company Discharges

The water company investment programme for the period 1995-2005 has been determined by OFWAT according to a technical framework set by the AMP2 Guidelines, produced by the NRA. This provides for a total Water Industry investment programme of around £24 thousand million; the NRA expects that there will be considerable improvements in the quality of marine and coastal waters as a result. Further improvement of freshwaters, particularly the poor quality industrial rivers, and those rivers where unsatisfactory combined sewer overflows can be improved are also expected. Within the expenditure profile there is an additional £522m agreed by the Secretary of State for a national programme of discretionary environmental improvements. The NRA has been requested to monitor the output from this programme and mechanisms for this are being put in place.

The figures above include £6 thousand million for the introduction of the Urban Waste Water Treatment Directive (UWWTD). The DoE has published the UWWTD Regulations 1994 which introduce the Directive into UK Statute. The NRA is in the process of technical policy development and determining the implementation arrangements for the Directive. A review of discharge consents will be required to meet the key implementation dates of 1998, 2000 and 2005 set by the Directive.

The NRA has published a Discharge Consent Manual setting out its detailed policy for setting new and revised discharge consents.

Liaison with HMIP, HSE and Other Regulatory Bodies

Following transfer of processes affected by IPC to HMIP the NRA and HMIP are currently producing a set of jointly agreed guidelines. These will consolidate the practices and procedures that have been drawn up over the past few years in anticipation of their integration on formation of the new Environment Agency.

The memorandum of understanding between the NRA and the Health and Safety Executive is being reviewed and updated. This covers areas of common interest related to pollution incidents and will further identify the practices and procedures to be followed where these overlap either currently or in the future.

Waste Licensing

New waste management licensing regulations were implemented on 1 May 1994 with the NRA being involved as a statutory consultee. A charging scheme to recover costs for NRA input to the licensing scheme was implemented in 1994/95 and work to improve its operation will continue.

EC Environmental Directives

Following the announcement of the EC proposals for a new framework Bathing Water Directive, the NRA has been evaluating the effects this will have in England and Wales. Advice on the implications regarding cost and compliance has been submitted to Government and has been included in its report to Europe. Work has commenced on evaluating proposals and revisions for framework directives on Ecological Water Quality, Dangerous Substances and the proposed action plan for groundwater management. It is anticipated that this will involve the NRA in an increased evaluation and assessment workload.

The NRA has also advised the European Commission and MEPs on the application of the proposed revised Bathing Water Directive and the proposed Ecological Quality of Water Directive in England and Wales and will maintain these contacts and provide advice as these proposals progress.

Pollution Prevention

Pollution prevention is of key importance to improvements in the water environment, especially with respect to diffuse sources of pollution. The NRA's efforts in pollution prevention will focus on working with others to achieve environmental improvement. Education, information and production of good practice statements will be targeted at maintaining and improving water quality.

During 1994/95 the NRA launched several initiatives to prevent pollution. These included a "Pollution Prevention Pays" video targeting small and medium enterprises, an "Oil Care" campaign which promotes the safe use and disposal of oil in all

premises ranging from the domestic user to the large petrochemical companies. Two leaflets on farm waste and farm waste management plans have also been published. The response from both the public and industry to these campaigns has been extremely high and will involve the NRA in a considerable workload in maintaining and continuing to promote these messages. In addition the NRA is supporting a "Bag it and Bin it" campaign in an attempt to promote awareness of alternative disposal options for inappropriate materials rather than disposal to the sewerage system, which often results in aesthetic pollution.

Abandoned Mines and Contaminated Land

Following the closure of Wheal Jane mine the impact of pollution from abandoned metalliferous mines remains a major concern. In previous Corporate Plans we have suggested the need to develop a prioritised programme of monitoring and capital works to reduce water pollution from such abandoned mines and contaminated land and this need continues. Legislative changes have been incorporated in the new Environment Bill; the owners or operators of mines abandoned after the end of 1999 will no longer have a defence against prosecution and exemption from recovery of expenses where water is permitted to flow from an abandoned mine. The new Environment Agency will be able to reclaim costs for remedial works at such mine sites.

The NRA will continue to lobby for changes in the legislation for both abandoned mines and contaminated land issues.

Coal Industry

Following the establishment of the Coal Authority the NRA has been involved in drawing up memoranda of understanding with both the Coal Authority and some of the major coal mining operators. This will cover the practices and procedures to be adopted by the NRA, Coal Authority and operators and will describe the standards of service necessary for efficient operation and regulation of the industry.

Figure 54 - Progress Against 94/95 Plan - Water Quality**Real World Targets**

To bring about improvement in the length of river and canal in the worst two classes from an estimated 4730km in 1994 to 3200km, and the length of estuary in the worst class from an estimated 120km in 1994 to 60km by 2005.

To monitor and report on bathing water compliance, forecast to reach at least 95% for the 1996 bathing season and as close as possible to 100% by the end of 1997 (this is in line with the Government target for bathing water compliance).

To revise consents and monitor and report on compliance with the Urban Waste Water Treatment and Nitrate Directives by 2005.

To prepare, in collaboration with other functions, at least two Catchment management plans, with proposals for WQOs in two catchments per region per year.

To undertake the quinquennial river survey of water quality in England and Wales in 1995.

To carry out 2 aerial coastal water surveys and define a further 200 groundwater protection zones in 1994/95

To facilitate environmentally acceptable options for introduction of self-monitoring by dischargers.

Progress

Work is ongoing to improve water quality and it is hoped that the improvements in river length will result largely from WSPIC investment in the AMP2 programme and discretionary schemes. The results of the General Quality Assessment (GQA) monitoring programme indicate that river quality has improved by 15% since 1990.

The NRA continues to monitor and report on Bathing Water compliance for Government. 82.5% of Bathing Waters were found to be compliant with the EC standards during the 1994 season.

NRA policy is nearing completion and a programme of consent revision will be phased with the AMP2 programme and agreed in discussion with OFWAT.

Work to translate RQOs from NWC classes to river ecosystem targets, both on a rolling programme and in future CMPs has begun.

Sampling for the quinquennial river survey of water quality in England and Wales has started.

Three aerial coastal water surveys were carried out and 50 groundwater protection zones were defined.

A policy for self-monitoring by dischargers has been agreed by the NRA Board.

Policy Targets

To advise DoE on likely quality objectives and commence the consultation and implementation process for introducing 20 pilot WQOs per annum.

To advise DoE on the effects of new EC bathing water monitoring proposals and to recommend new standards, parameters and compliance as appropriate.

To fully implement NRA's Groundwater protection scheme by December 1994.

To ensure that NRA promotes pollution prevention by production of a manual which will be targeted at trade associations and industry. To extend Waste Minimisation schemes and demonstration projects to rest of England and Wales following success of Aire and Calder project.

To seek the implementation of Regulations or Best Practice guidance governing the safe storage of oil.

To continue liaison with HMIP regarding IPC discharges transferring to HMIP and agree monitoring programmes for IPC discharges in line with the IPC implementation programme.

To liaise with HMIP and Waste Regulation authorities with respect to water quality issues that will be relevant to the future running of the Environment Agency.

Progress

DoE has approved the quality objectives and 8 pilot catchments, identified by the NRA, where they can be implemented.

The NRA has advised Government on the likely effects of the new EC bathing water proposals.

This has been fully implemented and a phased programme of GPZ definition is ongoing.

Pollution prevention video has been produced and manual developed. A programme of waste minimisation schemes has been supported by the NRA.

Pressure to implement these regulations continues to be brought.

Liaison with HMIP over IPC and related monitoring issues is ongoing.

Liaison with the NRA's future partners with respect to water quality issues is ongoing.

Use Of Resources**Income**

We will continue to use the revised charging for discharges scheme which came into effect on 1 April 1994. We are required to raise an amount equivalent to the costs of issuing and monitoring discharge consents and their impact on receiving

waters. In line with our continued commitment to keep cost increases at or below the rate of inflation, charges for the year 1995/96 have been increased by 3%.

Income from waste site licensing (which commenced 1 May 1994) has not reached previously planned levels. Future levels of income have been re-evaluated for this plan but collection of

these funds still remains uncertain. This is because of the lack of historical records on which to base future demand.

The transfer of industries to IPC continues with the final transfers scheduled for 1995/96. This means that from 1996/97 the full charging base will have been established and, for planning purposes, inflation only increases can be assumed thereafter.

While we remain committed to increasing the level of cost recovery from pollution incidents it is difficult to plan for with any certainty. This is especially relevant given the pleasing background of significant reductions in the number of serious pollution incidents.

Of our activities that are part funded by GIA, water quality is given the highest priority in both Government and NRA plans. We will continue to allocate as much GIA, which funds about half of our water quality work, as we can throughout the plan period.

Expenditure

We have continued to improve our efficiency including saving £3m pa from the National Laboratory Service and £1m pa by rationalising our sampling programmes. Consequently we are able to reduce expenditure in 1995/96 while maintaining our operational output. We have also utilised some of these efficiencies to keep charges down, and to contribute to the WAMS project which has had the effect of increasing capital expenditure. Water quality expenditure can be divided between work related to discharge consents and that for the general water environment.

The area of discharge consents activities includes issuing and reviewing consents, monitoring discharges and receiving waters, laboratory analysis and the maintenance of public registers. It is fully funded through the charging scheme and future expenditure is only planned to increase in line with inflation predictions.

Work for the general water environment is mainly funded from GIA. Activities include further monitoring of controlled waters, the provision of water quality reports, pollution prevention campaigns, attending pollution incidents (costs of which will be recovered from the polluter where possible), monitoring compliance with EC Directives, WQOs, R&D and other work for the Government. This latter category includes PARCOM, the North Sea and Irish Sea Conferences as well as alleviation of pollution from Wheal Jane mine.

We face increasing workloads on contaminated land, abandoned mines and from European Directives. All of these have a cost.

We (or the Environment Agency) cannot continue to extend our responsibilities without an increase in funding or reducing effort elsewhere. It is estimated that an additional £10m per annum is needed as a result of these activities.

We will continue to operate the polluter pays principle but without economic instruments there is little incentive for real improvement by some dischargers. While we believe there will always remain a need for central funding of general environmental protection, we will also aim to increase cost recovery.

Future Targets

Real World

- To bring about a reduction in the length of river and canal in the worst two classes by around 20% and in the length of estuary in the worst class by around 25% between 31st March 1995 and 2005 (based on current NRA estimates of the AMP2 programme).
- To monitor and report on bathing water compliance, forecast to reach at least 95% for the 1996 bathing season and as close as possible to 100% by the end of 1997 (this is in line with the Government target for bathing water compliance).
- To revise consents and monitor and report on compliance with the Urban Waste Water Treatment and Nitrate Directives by 2005.
- To translate RQOs from NWC classes to river ecosystem targets, both on a rolling programme and in any future catchment management plans.
- To complete the quinquennial survey of river water quality in England and Wales in 1995 and prepare a report during 1996.

Policy Targets

- To implement a programme of statutory water quality objectives in the 8 pilot catchments.
- To advise DoE on the likely effects of new EC Ecological Quality of Water and revised Bathing Waters Directives, and to recommend new standards, parameters and compliance as appropriate.
- To ensure that the NRA promotes pollution prevention by targeting trade associations and industry. To review Waste Minimisation schemes and publish the key lessons learned and the benefits to industries as a result of their application.
- To seek the implementation of Regulations or Best Practice guidance governing the safe storage of oil.
- To continue liaison with HMIP and produce joint guidelines in anticipation of integration into the Environment Agency.
- To liaise with HMIP and Waste Regulation Authorities with respect to water quality issues that will be relevant to the future running of the Environment Agency.

Figure 55 - Water Quality Income and Expenditure

£k	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
INCOME:							
Charging for Discharges	36628	42206	41304	41508	42373	43856	45391
HMIP / IPC	54	585	1231	1572	1743	1804	1867
Waste Site Licensing	0	0	1597	876	984	1018	1054
Pollution Incidents	790	797	991	787	905	937	970
Other	1875	2681	907	1637	1845	1910	1977
TOTAL	39347	46269	46030	46380	47850	49525	51259
EXPENDITURE:							
Revenue	68272	75782	82079	73684	75201	76702	78268
Capital	6708	7365	6042	10705	10777	10989	11209
TOTAL	74980	83147	88121	84389	85978	87691	89477
VARIANCE - GIA	35633	36878	42091	38009	38128	38166	38218

Figure 56 - Water Quality Staffing

FTE	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Total Water Quality Manpower	1140	1189	1269	1239	1241	1241	1241
Including:							
Pollution Inspectors	440	537	547	545	545	545	545
Excluding:							
Laboratories /National Laboratory Service	391	294	319	313	311	311	311

Before 1994/95 Total Water Quality Manpower represents complemented posts only. To improve our manpower controls we include all staff (ie complemented and uncomplemented) from Budget 94/95 onward.

Figure 57 - Water Quality Outputs

Outputs and Performance	Actual 92/93	Actual 93/94	Forecast 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
DISCHARGE CONSENTING							
Number of Discharge Consents	110545	121979	119512	121346	123011	123011	123011
Number of Discharges Monitored	14389	14173	14187	15133	15338	15338	15338
Number of Consents Determined	4674	4231	4804	4471	4375	4375	4375
SAMPLING, ANALYSIS and POLLUTION PREVENTION							
Thousands of Routine Effluent Samples	142	133	115	123	125	125	125
Millions of Analyses	6.10	5.74	5.01	4.31	4.26	4.26	4.26
Number of Site Inspections	22058	77553	68526	70893	70802	70802	70802
Number of Pollution Prevention Campaigns	86	274	235	217	220	220	220
Number of Pollution Incidents Reported	32254	31833	35000	-	-	-	-
Prosecutions Concluded	464	455	350	-	-	-	-
RIVER, ESTUARIAL and BATHING WATER QUALITY							
Bathing Water Quality:							
Number of EC Bathing Waters	416	418	418	425	425	425	425
Number Achieving Directive Standards	328	332	345	370	415	419	425
River and Canal Water Quality (km):	GQA Classification Scheme						
	⁽¹⁾ Actual 1992	Actual 1993	Forecast 1994	Estimate 1995	Estimate 1996	Estimate 2000	Estimate 2005
- Class A	7821	8592	8814	9443	9586	9787	10069
- Class B	11923	12978	13324	13717	13661	13810	13857
- Class C	8488	9181	9028	9322	9297	9136	8862
- Class D	4415	4174	3710	3755	3743	4144	4341
- Class E	4119	3803	3574	3633	3606	3189	2963
- Class F	757	657	577	481	458	289	264
Total Length Classified	37523	39385	39027	40351	40351	40355	40356
Estuarial Water Quality (km):	NWC Classification Scheme						
⁽¹⁾ - Class A (good)	1824	1784	1809	1835	1868	1972	1992
- Class B (fair)	700	728	694	667	651	599	580
- Class C (poor)	151	148	142	147	133	92	91
- Class D (bad)	121	121	122	117	115	86	86
Total Length Classified	2796	2781	2767	2766	2767	2749	2749

(1) Future water quality targets are based on current NRA estimates of the AMP2 programme

Figure 58 - Examples of Real World Activities in Water Quality



- 1 Prevent minewater pollution from Durham (1a) and Yorkshire (1b) coalfields.
- 2 Pilot project to remove dioxins from River Doe Lea.
- 3 Campaign for Rural Sewage Standardisation to reduce impacts of discharges along Cumbrian coast.
- 4 Investigation into water quality problems on Manchester Ship Canal and identification of solutions.
- 5 Identification and implementation of measures to reduce impact of River Tawe Barrage on water quality.
- 6 River Pelenna minewater treatment project using wetland treatment systems.
- 7 Diversion of Ffrwdwen Brook around Heyope tyre fire site to improve water quality.
- 8 Reduction in frequency of pollution from storm water overflows at Coventry, Leamington, Redditch and Stroud.
- 9 Consent review of STWs discharging into Rivers Bure and Ant to enhance phosphorous reductions.
- 10 Monitoring of British Steel Corby site effluent quality to ensure EC emission standards for zinc are met.
- 11 Education of potential polluters on risks of pollution through a programme of industrial site visits.
- 12 Groundwater monitoring project to gauge impact of landfill leachates on water quality in aquifers near Guildford.
- 13 Progress on Groundwater Protection Zone definition project to complete Upper Test catchment.
- 14 Schemes to achieve compliance with EC bathing water directive at Worthing, Shoreham & Brighton.
- 15 Secondary treatment ensured on Pennington outfall.
- 16 Pollution risk assessment of 26 English China Clay International sites in Cornwall.
- 17 Upgrading of Poole STW to improve water quality in Poole Harbour with Wessex Water plc.
- 18 Campaign of farm visits throughout Devon inspecting 80km of water course and over 120 farms.

WATER RESOURCES

Introduction

The Water Resources function is concerned with ensuring that existing management and future development of our water resources are carried out in a sustainable manner, taking account of the need to maximise economic efficiency but applying a precautionary approach where appropriate. The principal mechanism for achieving this is through the NRA's powers and duties associated with abstraction licensing. Nearly everyone who wishes to take water from rivers and underground water requires a licence from the NRA. In determining these applications the NRA must take account not only of the needs of abstractors but also those of the environment. The NRA is responsible for planning the need for water resource developments at local, regional and national levels and for allocating resources under licence to Water Companies, industry, agriculture and many others who abstract their own water.

Management involves protecting the quality of groundwater resources, as well as co-operating with abstractors to correct environmental problems which have resulted from excessive abstractions. It also involves ensuring that abstractors comply with the conditions on their licences. The NRA ensures that Water Companies comply with Operating Agreements that control how major water sources can be used. These are particularly important for reservoirs and river regulation schemes.

Assessment of surface and groundwater resources is fundamental to day to day and long term management of the water cycle. The NRA manages the Hydrometric Survey of England and Wales to meet this need. The data collected is used for operational and planning activities and is provided by agreement to the Natural Environment Research Council and Meteorological Office who publish it on behalf of Government.

Aims And Objectives

Our aim is to:

- manage water resources to achieve the right balance between the needs of the environment and those of the abstractors.

Our objectives are to:

- plan for the sustainable development of water resources, developing criteria to assess reasonable needs of abstractors and of the environment;
- collect, validate, store and provide hydrometric data and environmental data in order to assess water resources;
- apply a nationally consistent approach to abstraction licensing, including licence determination, charging, policing, and enforcement;

- implement a consistent approach to the resolution of inherited problems caused by authorised over-abstraction;
- work with other functions and external bodies to protect the quality of our water resources.

Key Issues

Refinement and Implementation of Water Resources Development Strategies

Strategies have been prepared at national and regional levels. Particular emphasis has been put on what is an achievable and economic level of demand management by the creation of the Demand Management Centre in Southern Region as this will have a major influence upon the timing of new water resources. Further work is underway to assess the environmental acceptability of certain resource development options.

Progression of the NRA's Plans to Alleviate Low Flow Problems Caused by Excessive Abstraction

With co-operation of the water companies and OFWAT a number of schemes are now being progressed by relevant water companies and overall good progress has been made, and will continue. Of the original "Top 40", 8 schemes are now fully implemented, a further 8 have solutions underway, 10 have an identified solution, 6 have on-going investigations and 8 have been identified as no longer being an abstraction problem.

Market Testing of Water Resources Activities

The efficiency review of selected hydrometric activities has now been completed with a decision to retain work in house. Progress is now being made towards introducing competitive tendering for site maintenance of hydrometric assets, and Service Level Agreements are being introduced to meet customer requirements at known costs. Option Appraisals are being carried out for Licence Enforcement and Operational Management during 1995/96.

Progression of the Means for Meeting Abstraction Needs for Small Abstractions

Various options have been highlighted to provide additional water resources for this class of abstractor and realistic opportunities will need to be found in conjunction with interested parties. Particular attention has recently been focused on how to help groups of spray irrigation licence holders make the best use of their existing licences.

Development of Quantitative Criteria for Setting Environmental Flow Requirements

Although more objective criteria are being developed to define acceptable flow regimes there is a continuing need to refine such techniques, both from the scientific and economic viewpoint.

Figure 59 - Progress Against 94/95 Plan - Water Resources**Real World Targets**

To define the following number of groundwater protection zones in accordance with the Groundwater Protection Policy:

1994/95	200	1996/97	300
1995/96	300	1997/98	200

To achieve the following percentage of licence applications determined within the statutory period of 3 months:

1994/95	76%	1996/97	79%
1995/96	78%	1997/98	82%

To achieve the following percentage of licence enforcement programme (critical and highly critical):

1994/95	88%	1996/97	90%
1995/96	89%	1997/98	90%

To alleviate low flows in the following lengths of rivers:

1994/95	21km	1996/97	42km
1995/96	43km	1997/98	30km

To alleviate low flows at the following number of specific sites:

1994/95	4	1996/97	1
1995/96	1	1997/98	2

To prepare, in collaboration with other functions, Catchment Management Plans according to the agreed timetable.

Progress

Around 850 groundwater protection zones will be defined by the end of the 94/95. This represents only 50 defined during the year, which is 25% of our target. Definition of GPZs has been affected by the remodelling of 150 existing GPZs to be considered for inclusion in the Government's Nitrate Vulnerable Zone (NVZ) and Nitrate Sensitive Area (NSA) programmes.

Performance during 1994/95 suggests that achievement will be around 73% which is a slight shortfall on target.

Performance during 1994/95 suggests that the target will be achieved and probably exceeded.

Low flows have been alleviated in 8km of river during 1994/95 with substantial progress being made on approximately another 18km.

Low flows alleviated at the following 3 locations during 1994/95: River Lea, River Black Ditch, Blakedown Valley.

Target achieved. 41 consultation reports and 15 Action Plans produced.

Policy Targets

To implement the actions contained in our Water Resources Development Strategy.

To complete the Efficiency Review of Hydrometry by December 1994 which examines options for service provisions and recommends the way forward.

To develop River Flow Objectives by March 1995.

To define the NRA's role in demand management by March 1995.

To decide the extent to which the results of the R&D project on Surface Water Yield Methodology will be applied, by September 1994.

To develop a methodology for cost benefit analysis which draws upon the R&D work associated with the evaluation of the benefits of low flow alleviation and the severity of the low flow problems, by December 1994.

To review proposals for technical determination of licence applications arising from an existing R&D project. To make proposals relating to implementation by March 1995.

Progress

Implementation underway and continuing.

Completed on target.

Interim report delayed to March 1996.

Demand Management Strategy now due for publication July 1995.

Implementation Group was set up, but this is now on hold due to competing priorities.

Completed on target.

Now due to be completed June 1995.

Use Of Resources**Income**

We will continue to raise funds through the scheme of abstraction charges introduced on 1 April 1993.

As a result of refunding accumulated balances in 1994/95 lower charges were paid than may have been the case. 1995/96 sees a return to more normal rates of charges. Real increases have been

kept at 3% or less which is in line with our aim to keep overall increases in charges at or below the rate of inflation.

Surpluses still arise from 1995/96 onwards. This is as a result of capital expenditure being less than revenues raised from current cost depreciation and rate of return on assets owned by the NRA. These will be used to offset within year shortfalls in funding requirements.

Expenditure

The profile of our capital expenditure has been slightly modified from last years Plan. We are now planning for a spend of £10m per annum throughout the Plan period. A more detailed breakdown of this expenditure is given in figure 63. Of particular importance in 1995/96 will be the implementation of our new Water Archive and Monitoring System (WAMS), low flow remediation on the river Darent and the Shropshire Groundwater Scheme.

Priority will continue to be given to the alleviation of low flows in partnership, where agreed, with relevant water companies. As a result of AMP2 negotiations some of the larger schemes, eg. the river Misbourne, are receiving more direct funding from the water companies. Consequently whilst our programme remains the same it has been possible to reduce the level of direct NRA funding from previously planned levels. It is hoped that other schemes currently under investigation and included in our capital programme will be accepted by the water companies. These may then be "logged up" with costs recovered at the next review of "K" or funded by companies from internal efficiencies.

As a result of this reprofiling we have allocated more capital expenditure to other areas which have not received full funding previously such as telemetry. In addition the implementation of WAMS means that an increase in multi-functional expenditure is required.

Revenue expenditure will continue to account for about 80% of our total expenditure. This will concentrate on licensing and enforcement, resource protection, hydrometry and operational management. We will operate in a cost effective manner and continue to review areas of our work through the market testing programme. About 50000 licences will be administered with some 18000 inspected annually to ensure compliance.

Future Targets

Real World

To define the following number of groundwater protection zones in accordance with the Groundwater Protection Policy:

1995/96	200	1996/97	250
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To achieve the following percentage of licence applications determined within the statutory period of 3 months:

1995/96	78%	1997/98	80%
1996/97	79%	1998/99	85%

To achieve the following percentage of licence enforcement programme (critical and highly critical):

1995/96	89%	1997/98	90%
1996/97	90%	1998/99	90%

To alleviate low flows in the following lengths of rivers:

1995/96	6km	1997/98	36km
1996/97	48km	1998/99	32km

To alleviate low flows at the following number of specific sites:

1995/96	3	1997/98	3
1996/97	3	1998/99	3

To prepare in collaboration with the other functions, Catchment Management Plans according to the agreed timetable.

Policy

To implement the actions contained in our Water Resources Development Strategy. This is to include the completion of sub projects for the review of local options, environmental requirements study and strategic option environment baseline studies.

To complete Option Appraisals of Operational Management and Enforcement by June 1995 which will examine options for service provision and recommend the best way forward.

To develop NALD (National Abstraction Licensing Database) ready for pilot implementation in 1996/97.

To continue to deliver the outputs required by the Groundwater Vulnerability Mapping Programme.

To publish a Demand Management Strategy in July 1995.

Figure 60 - Water Resources Income and Expenditure

£k	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
INCOME:							
Abstraction Charges	74270	77290	63842	80738	82388	85270	88255
Interest Received	2636	2230	1490	1525	1430	1480	1530
Other	771	1694	340	685	699	725	750
TOTAL	77677	81214	65672	82948	84517	87475	90535
EXPENDITURE:							
Revenue	65226	63990	64819	66324	66495	68820	71230
Capital	12394	8383	10571	10000	10000	10000	10000
TOTAL	77620	72373	75390	76324	76495	78820	81230
SURPLUS / (DEFICIT)	57	8841	-9718	6624	8022	8655	9305

Figure 61 - Water Resources Staffing

FTE	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Total Water Resources Manpower	777	741	782	775	775	775	775

Before 1994/95 Total Water Resources Manpower represents complemented posts only. To improve our manpower controls we include all staff (ie complemented and uncomplemented) from Budget 94/95 onward

Figure 62 - Water Resources Outputs

Outputs and Performance	Actual 92/93	Actual 93/94	Forecast 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
LICENSING							
Number of Licences in Force	48267	48189	48959	49170	49600	49600	49600
Total Licences Determined	1849	1489	1391	1339	1407	1407	1407
Licences Determined within Statutory Period	989	1106	1007	1118	1189	1189	1189
ENFORCEMENT							
Highly Critical and Critical Licences:							
- Inspections Required by NRA Policy	13348	15865	14449	13980	14105	14105	14105
- Number of Inspections Made	10342	12293	12681	12710	12820	12820	12820
Less Critical and Non Critical Licences:							
- Inspections Required by NRA Policy	8205	10252	7387	6658	6700	6700	6700
- Number of Inspections Made	4651	6553	4184	4881	4811	4811	4811

Figure 63 - Water Resources Capital Expenditure Programme

Scheme	1995/96 (£k)	1996/97 (£k)	1997/98 (£k)
Alleviation of low flows	1200	1300	1400
Water Resources planning	0	100	100
Hydrometry	3100	3200	3300
Operational management	1200	1400	1800
Resource protection	200	200	200
Licensing	100	100	0
Small schemes	200	300	400
Multifunctional	4000	3400	2800
Total	10000	10000	10000

Figure 64 - Examples of Real World Activities in Water Resources



- | | |
|--|--|
| 1 River Derwent ALF scheme investigation. | 10 Bulbourne ALF scheme investigation. |
| 2 West Beck ALF scheme investigation. | 11 Implementation of Misbourne ALF scheme (in conjunction with water companies). |
| 3 River Gelt ALF scheme investigation. | 12 Little Stour ALF scheme investigation. |
| 4 Transfer of water supply abstraction sources to low environmental impact sites on Wye catchment. | 13 Completion of augmentation wells for River Darent ALF scheme. |
| 5 New gauging station at Deerhurst. | 14 Completion of Alre groundwater augmentation scheme. |
| 6 Stour Valley - ALF scheme in Blakedown Brook. | 15 River Avon ALF scheme Action Plan. |
| 7 Shropshire Groundwater Scheme- developing 9 new boreholes to improve regulation of River Severn. | 16 River Piddle ALF scheme Action Plan. |
| 8 Relocation of water supply abstraction source to protect Redgrave and Lopham Fen SSSI. | 17 River Tavy ALF scheme investigation. |
| 9 Pumping plant refurbishment - Trent Witham / Ancholme water transfer scheme. | |

(ALF = Alleviation of Low Flows)

FLOOD DEFENCE

Introduction

The NRA:

- has an overall supervisory duty over all matters relating to flood defence in England and Wales and is required to carry out surveys to support all the flood defence functions.
- advises Local Planning Authorities on flooding issues related to proposed developments and seeks to influence development plans. Prior consent must be obtained from the NRA before any structure in, over or under a main river is constructed.
- may construct new works and undertake to improve or maintain existing flood defence systems. It must ensure that works conserve or enhance the environment.
- has powers to provide and operate flood warning systems on all watercourses and sea defences. Arrangements are made with the police and local authorities to warn the public and provide assistance.

Regional Flood Defence Committees are responsible for the discharging of all flood defence functions, with the exception of the general supervision of all matters relating to flood defence, the raising of drainage charges, levying of precepts and the borrowing of money.

Aims And Objectives

Our aims are to:

- provide effective defence for people and property against flooding from rivers and from the sea;
- provide adequate arrangements for flood forecasting and warning.

Our objectives are to:

- develop and implement the flood defence strategy through a systematic approach for assessing capital and maintenance requirements and develop medium and long-term plans for those defences owned and maintained by the NRA;
- encourage development of information technology and extension of facilities which will further improve the procedures for warning of, and responding to, emergencies;
- support R&D which will assist in identifying future flood defence needs;
- review best practices for all operational methods and the identification and justification of work, thus increasing efficiency and enhancing value for money;
- heighten general awareness of the need to control development in floodplains and contribute to the development of catchment management plans;
- identify opportunities for the enhancement of environmental, recreational and amenity facilities when undertaking flood defence works.

These aims and objectives are consistent with the MAFF flood defence strategy.

Key Issues

Flooding

Despite an exceptionally wet winter, there was comparatively little property flooding in England and Wales. Problems elsewhere in Europe, however, have demonstrated the key role that integrated river basin management must have. This consists of prevention (development control), alleviation (building, maintaining and operating defences), and damage limitation (flood warning). The process of flood risk management is a multi-agency one, involving national government and democratic planning bodies as well as local pressure groups and the NRA. This requires understanding of other parties' work and responsibilities, and ongoing dialogue to maintain links and ensure an effective approach to the issues surrounding flood management. Several of the specific issues that follow demonstrate the NRA's continuing work to maintain and develop this liaison.

Planning Liaison

Following the signing of a Memorandum of Understanding between the NRA and the Associations of the Planning Authorities, considerable work has taken place to develop a robust programme of surveys. This has involved close liaison between local authorities and their respective NRA regional and area staff, strengthening links between the bodies. Prioritised schedules of catchments have been drawn up and pilot studies undertaken to ensure the robustness of cost data. Once available, the information will considerably strengthen the decision making process in relation to building in the floodplain by informing the various Development Plans, hence reducing the amount of inappropriate development taking place. In the long term this will influence the NRA's investment programmes as less 'remedial' protection work will be needed.

Flood Warning Roles

Discussions, led by MAFF, are underway between local authorities, the Police and the NRA to discuss responsibilities for flood warning roles. By working in partnership with each other, the organisations concerned should be in a position to build on and improve existing flood warning arrangements. Whilst the NRA accepts that it might assume the lead role for the dissemination of Flood Warnings, Government (through MAFF) must fully define the roles and responsibilities of all organisations involved. It will be essential for the appropriate levels and sources of funding to be identified and allocated before full commitment can be given.

Managing Flood Defences

Within the framework of integrated flood risk management, the largest amounts of money are spent on the building and future maintenance of defences, as well as works to the watercourse itself to ensure that flood flow capacity is adequate. It is clearly important that this work is identified, justified and prioritised in a rigorous and objective manner. The Flood Defence Management Manual, containing best practice in these areas, is

available. A supporting computer system (Flood Defence Management System) to hold the large quantity of data available is being developed, and within the year will be piloted in one region. There are links between the types and use of data for this and the Circular 30/92 development control surveys, as well as flood warning information. These links have been identified and the benefits of storing and using the data in the most productive manner will be exploited.

Sea Defence Survey Update

Management of defences in a cost-effective way requires suitable up-to-date information on asset condition and the consequences of asset failure. In 1990/91 a large data gathering exercise was undertaken to discover the condition of England and Wales' sea and tidal defences. MAFF subsequently undertook a review of coastal defences, with the two surveys together providing a comprehensive overview of the situation. It is now intended to update the survey to ensure that management data in this critical area is up-to-date and in an easily used format. It is planned to gather data in a way which allows it to be held and interrogated on the FDMS, with a rolling programme of updates to ensure that the data does not become outdated.

Figure 65 - Progress Against 94/95 Plan - Flood Defence

Real World Targets

Where flood warning schemes exist, to provide warnings of flooding to the police in 90% of cases when flooding occurs, and when catchment characteristics and circumstances allow, to do so at least 2† hours before the onset of flooding.

To improve determination of Land Drainage Consents applications to 99% within the 2 month statutory period.

To undertake maintenance on defences protecting 2.3 million house equivalents in every Plan year. (This figure to be reviewed following full completion of Standards of Service exercise).

To complete a capital programme of £122m in 1994/95 to further protect people and property from the risk of flooding and reduce balances to 5-10% of total spend.

To prepare, in collaboration with other functions, Catchment Management Plans and Water Level Management Plans according to agreed timetables.

Progress

Flood warnings were reported as having been received in 62% of areas where properties were subsequently affected by flooding. As some of the flooded property counted may be outside Networked areas, there may be an understatement of the success of issuing warnings where a Flood Warning Network is in place.

Performance through the year is forecast to reach 99%.*

A full programme of maintenance works has been undertaken within the regions. Approximately 2.0 million house equivalents were provided with protection through the year. This is in line with our target, given refinements in definition during the year.*

Expenditure is anticipated to be £119m, despite ongoing approval problems on two major schemes. By the end of year, balances were reduced to 12% overall. Three regional Flood Defence Committees did not achieve the 10% target.*

Full input has been provided to CMPs. For Water Level Management Plans, liaison has taken place with English Nature and programmes of work progressed with them. Joint seminars have taken place with EN, the Association of Drainage Authorities and MAFF to promote and develop understanding of the principles and processes involved.

† In our 1994/95 Corporate Plan, this was incorrectly printed as 3 hours.

* Interim values

Policy Targets

A policy and practice document laying out the Flood Defence approach to floodplain protection in relation to development will be published in March 1995. The policies described will take into account the NRA's commitment to sustainability.

The Flood Defence Management Framework pulls together Standards of Service, asset management, project management, cost benefit justification and programme prioritisation. Over the Plan period the Framework will be finalised and issued for guidance, and the associated computerised system will be put in place. Phased implementation will take place across NRA regions with the speed of uptake dependent on the amount of data already held.

Once the requisite approvals have been gained, regional implementation of the Emergency Response Levels of Service will begin in 1994/95. The end of the process is planned for 1996/97.

New guidelines on Main River Policy are currently being tested in North West region. It is intended to have nationally consistent policy drafted by January 1995 with implementation following agreement with MAFF, Local Authorities etc. by September 1996.

The 10 Year Needs Plan and prioritisation package will be introduced for the September 1994 Medium Term Plan.

Policy on dam failure is to be determined by September 1994.

Two post project appraisals will be carried out in all regions by March 1995. Phase IV of the Sea Defence Survey will be published in August 1994.

A framework for Sea Defence Survey updates is to be in place by July 1994.

Progress

Good progress has been made in drafting the document which is now passing through consultation stage. It is now intended to launch the document in Autumn 1995.

Final editing of the Manual has commenced and a 'user-friendly' summary document developed. A business needs review is currently underway for the computerised system. Dependent on the outcome it is anticipated to be piloted in one region in February 1996. Other regions will take up the System in 1996/97.

National Levels of Service have been agreed, and methodologies and improved output performance measures developed. Final implementation of the procedures will be dependent on resource availability and corporate priorities.

On target. A review of the resource implications of implementation of the guidelines is underway. It is proposed that the guidelines need only be applied where there are perceived problems with the quality of service received by the public.

This has been successfully introduced. As the quality of data improves and familiarity with the system increases, improvements in project scheduling will increase value for money on the capital programme.

Scope of project increased due to interlinking with reservoir enforcement within the Environment Agency. Analysis of the Institute of Civil Engineers methodology is now underway, with project completion in December 1995.

Fully achieved.*

Whilst regions are aware of the condition of their assets and are able to use the data gathered during Phase IV of the Survey, regional variations in data format do not allow uniform national reporting.

A framework has been developed which is fully compatible with the Flood Defence Management Manual. Formal updating will commence during the year, trialling in one region. A rolling sequence of surveys will take place which will create a "live" database for management use.

* Interim values

Use Of Resources

Income

Income for our flood defence activities is raised from a number of sources. These include:

- raising levies from county, metropolitan district, and London Borough councils;
- by a general drainage charge (Anglian region only);
- by precepting local drainage boards;
- by grant-aid from MAFF and the Welsh Office;
- by other sources such as issuing land drainage consents and rechargeable works.

The major income source is from levies and the general drainage charge. In setting levies each year the level of accumulated

balances is a major influence. A review of these balances was undertaken in Autumn 1994 to assess those balances likely to be in excess of 10% of expenditure at the end of the year. 13 local committees are expected to be in excess and of these only 2, Lincolnshire and Usk, will seek dispensation to carry the excess beyond the end of 1995/96.

As a result, levy increases have generally been held at below 3% for 1995/96. The exception to this is Hampshire, where pressure on work and resources has resulted in an increase of 4.7%.

The level of MAFF and Welsh Office grant has been reduced for 1995/96 from previous plan levels but still represents a slight increase from actual grant claimed in 1994/95. This is sufficient to allow a capital programme of some £126m to be undertaken,

which is seen as achievable. Amounts for 1996/97 and beyond are anticipated to return to previously advised levels.

Expenditure

Our capital programme is developed as a balance between an ideal need and the ability to realistically achieve our plans. The overall priority remains sea and tidal defences to protect urban areas followed by fluvial defences protecting similar areas. This priority is reflected in the composition of our overall programme.

All schemes will continue to be assessed and appraised for their economic soundness and environmental acceptability. It is important that once funding is secured schemes proceed to plan. Expenditure on delayed schemes, especially large ones, cannot always be easily substituted without causing subsequent funding difficulties. Major schemes that will be progressed during 1995/96 include the long delayed Maidenhead, Windsor and Eton scheme (Thames), the Lincshore Beach Recharge (Anglian), Polperro (South Western) and the river Colne (Thames).

In addition to our capital expenditure a programme of revenue and maintenance works will continue along the full length of our flood defences. Work continues to improve the efficiency of all that we do including examining working practices and terms and conditions of our employees.

We will continue to seek to influence Town and Country Planning by having input into development plans, providing Circular 30/92 surveys and commenting on planning applications. The provision of, and improvement to, flood warning systems will also continue.

Future Targets

Real World Targets

- Where flood warning schemes are in place, to provide warnings of flooding through agreed channels in 90% of cases when flooding occurs, and, when catchment characteristics and circumstances allow, to do so in time to allow the public to be warned at least two hours before the onset of flooding.
- To determine 99% of Land Drainage Consent and byelaw applications within a 2 month period.
- To undertake maintenance on defences protecting 2.0 million house equivalents in every Plan year.
- To complete a capital programme of £126m in 1995/96 to further protect people and property from the risk of flooding and reduce balances to 5-10% of total spend.
- To prepare, in collaboration with other functions, Catchment Management Plans and Water Level Management Plans according to agreed timetables.

Policy Targets

- Data collection for the Circular 30/92 project to commence.
- A policy and practice document laying out the Flood Defence approach to floodplain protection in relation to development will be launched in Autumn 1995. The policies described will take into account the NRA's commitment to sustainability.
- The final report on flood warning roles and responsibilities will be produced by the end of the calendar year, with regional consultation seminars complete by the end of July.
- The final, edited version of the Flood Defence Management Manual and its associated Summary document will be produced by August 1995. Pilot implementation of the computerised system will commence in February 1996, with other regions taking up the system in the subsequent year.
- An update of the Sea Defence Survey will be required by MAFF in January 1996. The information provided will be in an agreed format and will form part of a process of continual update to maintain a live database.
- To ensure delivery of the statements within the function's Strategy, and to maintain the process of continually reviewing our practices to ensure effective and efficient operation, a Flood Defence Business Plan will be produced in August 1995. This will give realistic targets for regional implementation of national initiatives and lay out the direction of the function into the Environment Agency.
- A review of the Flood Defence charging policy for the granting of consents will take place during the year, with a report on its recommendations due in February 1996.

Figure 66 - Flood Defence Income and Expenditure

£k	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
INCOME:							
Levies / General Drainage Charges	186854	173132	153622	174324	189949	196597	203478
Land Drainage Consents	126	197	154	191	191	198	205
Rechargeable Works	2377	2628	1984	2055	2031	2102	2176
Interest Received	12306	8993	7575	4522	3765	3897	4033
MAFF / Welsh Office Grants	34533	34521	39700	42388	49400	49400	49400
Other	2916	8335	4164	4804	4297	4447	4603
TOTAL	239112	227806	207199	228284	249633	256641	263895
EXPENDITURE:							
Revenue	115075	126912	119462	122867	121840	116641	123895
Capital	112724	104838	122506	126499	140000	140000	140000
TOTAL	227799	231750	241968	249366	261840	256641	263895
SURPLUS / (DEFICIT)	11313	-3944	-34769	-21082	-12207	0	0

These figures include run down of the special asset replacement fund in the Thames region

Figure 67- Flood Defence Staffing

FTE	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Total Flood Defence Manpower	3135	3036	3056	3044	3048	3048	3048
Including:							
Plant / Vehicle Services	99	38	35	31	31	31	31
Planning Liaison	119	118	118	118	118	118	118
Emergency Planning	17	19	18	18	18	18	18
Communications / Control Rooms	35	34	39	39	39	39	39

Before 1994/95 Total Flood Defence Manpower represents complemented posts only. To improve our manpower controls we include all staff (ie complemented and uncomplemented) from Budget 94/95 onward.

Figure 68 - Flood Defence Outputs

Outputs and Performance	Actual 92/93	Actual 93/94	Forecast 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
IMPROVEMENT							
Housing Equivalents Protected by Completed Capital Schemes	42547	95121	92943	100726	58702	58702	58702
Number of HEs Protected per £1000 Capital Expenditure	0.4	0.9	0.8	0.8	0.4	0.4	0.4
Length (km) of Flood Defence Improved	179.48	160	155	187	234	234	234
MAINTENANCE							
Thousands of Housing Equivalents Receiving Benefit from Maintenance	1911	2564	1960	2023	3083	3083	3083
Number of HEs Benefitting per £1000 Revenue Expenditure	17	20	16	16	25	26	25
Length (km) of Flood Defence Maintained	31253	32154	36615	37627	37791	38000	38000
CONSENTING							
Consents Determined	5899	6550	6942	6976	7051	7051	7051
% Determined within Statutory Period	105.6	97.7	99.0	99.2	99.3	99.3	99.3

Figure 69 - Examples of Real World Activities in Flood Defence



- | | | |
|--|---|--|
| 1 Chester Burn. | 11 Severn Beach and Avonmouth sea defences. | 21 Maidenhead, Windsor and Eton FAS. |
| 2 River Derwent defence maintenance. | 12 Desilting River Tame middle reaches. | 22 Upper Thames: programme of maintenance for 3670 km of fluvial defences. |
| 3 Salt End (Humber Flood Defence Strategy). | 13 Colwick Sluices refurbishment. | 23 Lymington - Pennington tidal scheme. |
| 4 River Irwell. | 14 River Erewash at Ilkeston. | 24 Chichester and Barnham. |
| 5 New FAS at Cockermouth, Maryport and Whitehaven. | 15 King's Lynn- Denver tidal defences. | 25 Shoreham - Lancing sea defences. |
| 6 Overton/ Middleton. | 16 Lincshire Phase 2. | 26 Northern Sea Wall sea defences. |
| 7 Glasdon sea defences. | 17 Parkston tidal defences. | 27 Polperro flood defence scheme. |
| 8 Wentlooge sea defences. | 18 River Yare: Berney Arms to Reedham. | 28 River Exe defence maintenance. |
| 9 Dafen FAS. | 19 Lower Colne improvement scheme. | 29 Preston Wall beach recharge. |
| 10 Afon Wydden FAS. | 20 Upper Lee: Weothampstead. | |

(FAS = Flood Alleviation Scheme)

FISHERIES

Introduction

The role of the fisheries function within the NRA is to maintain, improve and develop fish stocks, the basic fisheries resource, in order to optimise the social and economic benefits from their sustainable exploitation.

Within the NRA's powers, the resource will be managed so as to maintain its current status and meet statutory obligations. Where a need is identified and resources permit, fisheries management strategies will be designed to enhance and develop the resource.

Legislation provides us with the following duties and powers:

- Regulation of fishing
- Anti poaching
- Enforcement
- Protection and improvement of fish habitat
- Control of movement and introduction of fish
- Control of fish disease
- Monitoring of fisheries

Aims And Objectives

Our aim is to:

- maintain, improve and develop fisheries.

Our objectives are to:

- protect and conserve salmon, trout, freshwater, eel and, where appropriate, coastal fisheries;
- regulate fisheries through the enforcement of a consistent series of licences, orders, byelaws and consents;
- monitor the fisheries status of rivers and inland, estuary and, where appropriate, coastal waters;
- formulate policies to maintain, improve and develop fisheries and restore and rehabilitate damaged fisheries;
- provide an efficient and effective fisheries service which is responsive to the needs of its customers and which is based on a sound charging system.

Key Issues

Reduction in Government Funding

Last year government Grant-in-Aid (GIA) for fisheries was reduced by 30%. Further cuts in GIA are planned. Expenditure on trout and coarse fisheries is funded entirely by rod licences. Therefore GIA is used only to fund expenditure

on salmon and sea trout fisheries, contributing about 90% of such expenditure. The NRA Board consider it inappropriate to increase trout and coarse licence duties to fund a shortfall in expenditure on salmon and sea trout expenditure. To minimise any impact of GIA cuts on the NRA's service to salmon and sea trout fisheries, it will be necessary to seek to:

- (i) maximise income from beneficiaries
- (ii) enhance efficiency to reduce costs

Income from Salmon Rod Fisheries

Income from salmon rod licences only totalled £1.1m in 1994/95 compared to £1.76m expenditure attributed to the direct benefit of migratory salmonid rod fisheries out of a total expenditure of some £12m on salmonid fisheries. Rod licence duties will need to be reviewed again to increase income from salmon anglers. Methods of obtaining funding from fisheries owners will also need to be reviewed.

Licence Evasion

The National Angling Survey 1994 indicated a high level of licence evasion particularly, though not exclusively, amongst young and occasional anglers. The loss in income to the NRA from such evasion is likely to exceed £2m. Improved promotion to educate anglers, coupled with targeted enforcement and the promotion of concepts such as rod licence display, should reduce evasion.

Net Licences

NRA costs incurred because of and on behalf of net fisheries significantly exceed income from net licence duties. The NRA has completed a consultation with netting interests, its Regional Fisheries Advisory Committees and others, on the future basis for net licence duties for migratory salmonid fisheries. The NRA will submit proposals and aim to implement a revised structure for duties in 1996 that is nationally consistent.

Enforcement

As one of the main areas of expenditure for salmon fisheries, cost effectiveness in anti-poaching work is crucial. We will be market testing our enforcement activities in 1996/97 which may lead to the adoption of different methods and result in significant efficiency savings.

Byelaws

Following the implementation of national close season byelaws and a review of other byelaws, further simplification of fisheries byelaws should be progressed, through promotion of (i) national byelaws, where relevant and (ii) regional byelaws in, where possible, a nationally consistent format.

Figure 70 - Progress Against 94/95 Plan - Fisheries

Real World Targets

To enable effective fisheries management activities to be carried out we will survey sites to represent 10000km of river in every plan year.

To attend 90% of significant fish mortalities within target time of 2 hours during normal working hours, and within 4 hours at other times.

To prepare, in collaboration with other functions, Catchment Management Plans in accordance with the agreed timetable.

To build 46 major fishery habitat improvement structures.

Progress

*Site surveys representing approximately 8500km have been completed.

*Of those incidents where attendance would have been productive 98% were attended within target time.

*This programme has been met in the plan period. Fisheries have fully contributed to Catchment Management Plans.

The number of improvement structures built during 1994/95 will exceed this target.

Policy Targets

Finalise the development of a strategic approach to maximise income, target resources, increase efficiency, and justify future GIA.

Recommend a consistent, equitable national system for net licence duties and undertake public consultation on a set of proposals.

Implement the conclusions from the review of the coarse fish close season and continue to establish consistent national fisheries byelaws where appropriate.

Institute a national framework for the management of salmon fisheries.

Review and establish the basis on which Net Limitation Orders (NLOs) should be made.

Develop a national strategy for anti-poaching enforcement including preparation for efficiency review.

Instigate a national strategy to ensure 95% rod licence compliance and standardise enforcement and prosecution policy in England and Wales.

Develop, together with Recreation, Conservation and Navigation managers, an FRCN training programme.

Progress

Full review of fisheries activities completed and approved by the Board in May 1994 for implementation.

Public consultation on discussion paper completed by January 1995.

Proposed byelaws submitted to MAFF in December 1994. Modified byelaws were confirmed and implemented in March 1995. Potential for other national byelaws identified.

Draft salmon management strategy circulated for consultation and well received. Revised strategy to be presented for Board approval in 1995.

A national project group has been established. Representatives from Regions have met with MAFF and Welsh Office officials to review basis. NLOs for Anglian and Welsh Regions advertised.

A national project group has been established.

Rod licence enforcement practices reviewed in the light of National Angling Survey 1994. Recommendations of review adopted for 1995/96. Potential for mandatory rod licence display assessed.

Fisheries leadership training programme commenced, and well received.

*Provisional values

Use Of Resources**Income**

Most of our income for fisheries work comes from duties on rod fishing licences. We also generate income from net licences, fish sales and from other services we provide.

In 1994/95 Post Office Counters Limited distributed and sold rod fishing licences on our behalf. This new arrangement increased the number of outlets for licences and reduced our administration costs. Wider availability has resulted in more licences sold and, with the two-tier national rod licence introduced in 1994/95, we raised over £12m in the year.

The increased volume of rod licence sales has allowed us to keep duties at their 1994/95 levels, and we plan to increase non-migratory salmonid and coarse fish licence fees by no more than inflation in future.

Migratory salmonid fisheries are heavily dependent on grant in aid. The amount of this grant that we receive from Government is declining, and we will need to increase revenue in future to offset the reduction. We are reviewing duties for rod and net licences for migratory salmonids, with the aim of maximising revenue.

Expenditure

About half our spending is on non-migratory trout and coarse fisheries, and is funded entirely by income from the sale of rod licences. Our remaining expenditure is on salmon and sea trout fisheries, of which licence income only covers 10%. The shortfall is made up with grant in aid, which has been reduced by over 30% since 1993/94. Almost half this grant goes towards anti-poaching work, which we believe should continue to be paid for out of the public purse. If grant in aid is reduced any further than already planned, it will have a direct impact on work on migratory salmonid fisheries.

In 1994/95 we completed a review of our fisheries activities that will enable us to prioritise our work more effectively. The services we provide include enforcement, monitoring, rearing and stocking, regulation, habitat improvement and fish rescues. This year about 60% of total fisheries costs will be recovered from charges, in line with government requests.

Future Targets

Real World Targets

- To enable effective fisheries management activities to be carried out we will survey sites to represent 8500km of river in every plan year.
- To attend 90% of significant fish mortalities where emergency attendance is necessary within target time of 2 hours during normal working hours and within 4 hours at other times.
- To build 150 fishery habitat improvement structures.
- To check 15% of all rod licences sold (excluding multiple checks).
- To increase sales of rod licences by 15%.

Policy Targets

- Recommend and implement a consistent and equitable national system for net licence duties for migratory salmonid fisheries.
- Identify priorities and implement the conclusions from the review of fisheries byelaws.
- Continue to develop a national strategy for anti-poaching enforcement including preparation for efficiency review.
- Promotion of concept of rod licence display to obtain public and Government support for introduction by the Environment Agency in 1996.
- Rod licence enforcement training to relevant staff by March 1996.
- Increase rod licence sales through enhanced marketing and enforcement to achieve an income target of £12.6m.
- Publish National Salmon Management Strategy and distribute to all relevant parties and prepare implementation plan.
- Review of rod licence structure and duties with the view to maximising income.
- Review of current legislation governing salmon, freshwater fish and eels.

Figure 71 - Fisheries Income and Expenditure

£k	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
INCOME:							
Rod Licences	9640	10147	11834	12640	13181	13646	14128
Net Licences	123	98	135	145	147	152	157
Fish Sales	228	148	171	59	61	63	65
Other	698	819	395	564	399	413	427
TOTAL	10689	11212	12535	13408	13788	14274	14777
EXPENDITURE:							
Revenue	20776	22624	20607	19337	19479	19923	20382
Capital	2488	2872	1027	2473	1821	1863	1907
TOTAL	23264	25496	21634	21810	21300	21786	22289
VARIANCE - GIA	12575	14284	9099	8402	7512	7512	7512

Figure 72 - Fisheries Staffing

FTE	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Total Fisheries Manpower	456	489	531	515	515	515	515
Including:							
Fisheries Inspectors / Bailiffs	275	259	266	259	259	259	259

Before 1994/95 Total Fisheries Manpower represents complemented posts only. To improve our manpower controls we include all staff (ie complemented and uncomplemented) from Budget 94/95 onward.

Figure 73 - Fisheries Outputs

Outputs and Performance	Actual 92/93	Actual 93/94	Forecast 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
ENFORCEMENT OF ROD LICENCES							
Thousands of Rod Licences Sold	862	881	1005	1156	1156	1156	1156
Thousands Checked (excluding multiple checks after 1993/94)	250	271	200	208	210	210	210
% of Licences Checked	29	31	20	18	18	18	18
% Licence Compliance	95	95	95	94	95	95	95
MONITORING							
Number of Netting / Electro Surveys	2069	2992	3528	3654	3666	3666	3666
Total Length (km) of River Surveyed	9203	9600	8342	8553	8658	8658	8658
HABITAT IMPROVEMENT							
Improvement Structures Built	42	216	158	151	150	150	150
THOUSANDS OF FISH STOCKED							
Salmonid	4827	4049	5395	4816	3965	3965	3965
Non-Salmonid	914	1297	796	821	821	821	821

Figure 74 - Examples of Real World Activities in Fisheries, Conservation, Navigation, and Recreation



- 1 Ecological and Fisheries impact monitoring of Tees barrage.
- 2 Input into the River Skerne restoration (part of an EC LIFE project).
- 3 Habitat improvement and fish reintroduction, River Rother.
- 4 Prototype salmon management plan, River Leven.
- 5 Cumbrian lakes monitoring strategy.
- 6 Inputs to Medlock Clough development scheme, a Millennium Commission funded project.
- 7 Spawning tributary access to parts of Upper Wye catchment.
- 8 New responsibility for Dee navigation duties in outer estuary.
- 9 Tryweryn world wild water racing championships.
- 10 New fish pass at Tewkesbury, River Severn.
- 11 New footbridge to restore access to parts of fishery.
- 12 Improvements to recreation and conservation features along several stretches of the Severn valley.
- 13 Rock chute fish pass on River Cole to allow upstream migration of coarse fish in an urban river.
- 14 Reconnection of old lock pond to main River Stour at Nayland, improving fisheries and conservation habitat.
- 15 Restoration of wet meadow alongside 1km stretch of Witham washland.
- 16 Re-creation of historical habitat features in Breckland ESA.
- 17 Lock reconstruction to improve navigation of Little Ouse in Brandon.
- 18 Completion of a salt water barrier at Potter Heigham to protect coarse fish.
- 19 Strategy for funding of urban environmental enhancement schemes, Lower Lee catchment.
- 20 Promotion of new navigation licensing and general byelaws.
- 21 Input to Thatcham reed bed management plan.
- 22 Ensure environmental provisions for Channel Tunnel rail link.
- 23 Fisheries strategy for Rivers Test and Itchen.
- 24 New lock and sluice constructions to maintain Medway navigation.
- 25 Fisheries habitat improvement programme.
- 26 Progress Somerset Moors and Levels strategy, to include ESA designation and water level management plan.

CONSERVATION

Introduction

The NRA is entrusted with conservation responsibilities in respect of wildlife, landscape and natural beauty, geological and physiographical features, buildings and other objects of archaeological, architectural or historic interest. These responsibilities relate to all inland and coastal waters, and to land associated with them in England and Wales.

The conservation duty is a fundamental requirement for the NRA in carrying out all its regulatory, operational and advisory activities. The Water Resources Act 1991 imposes duties to further and promote conservation and to consult with respect to sites of special interest.

The Code of Practice on Conservation, Access and Recreation was issued under the provisions of the Water Act 1989.

Aims And Objectives

Our aim is to:

- conserve and enhance wildlife, landscape and archaeological features associated with inland and coastal waters of England and Wales.

Our objectives are to:

- assess and monitor the conservation interest of inland and coastal waters and associated lands;
- ensure that the NRA's regulatory, operational and advisory activities take full account of the need to sustain and further conservation;
- promote conservation to enhance the quality of the aquatic and related environment for the benefit of wildlife and people.

Key Issues

Conservation continues to underpin the activities of the NRA, particularly in the lead up to the Environment Agency.

With this in mind, and the need for a consistent approach in setting targets and measuring performance, three areas remain significant:

Conservation Classification

The refinement and implementation of River Habitat Survey (RHS), a summary evaluation of freshwater river habitats, to complement the classification already established for water quality is the main priority. RHS will provide the necessary inventory to aid decision-making in response to external applications. It will also provide a reporting mechanism for catchment management plans and a national state of the environment report on river habitats.

Environmental Appraisal and Authorisations

Development of a consistent approach to environmental appraisal and the applications of a standard quality control to (i) internal NRA activities, (ii) applications screened for NRA consenting and licensing requirements and (iii) advice provided through the planning process is a continuing priority. Production of standard checklists for scoping different types of development will be a major milestone.

Collaboration and Partnership

In addition, collaborative work to enhance riverine, coastal and wetland habitats will continue with those organisations that have a common interest in conservation.

Use Of Resources

We take account of conservation in the work of all our core functions in accordance with Section 16 of the Water Resources Act 1991. This makes it difficult to give an exact cost of our activities. We estimate total spending by the other NRA functions on conservation related activities to be about £17m, a large part of which is incurred in our flood defence works. We also spend about £3m per annum directly on conservation activities, and this is funded almost entirely from grant in aid. Figure 75 shows an approximate functional split of the total (about £20m) conservation spend by function.

Our direct conservation activities include habitat improvement works, river corridor surveys and advising other NRA staff on the potential impacts and conservation opportunities of NRA works. We also provide screening input to applications for NRA licences and planning applications. Our river corridor survey programme provides us with a large and expanding map-based reference source from which to give this advice. In future River Habitat Surveys will provide us with the capability of classifying sites on the basis of habitat quality.

Figure 75 - Conservation Spend by Function

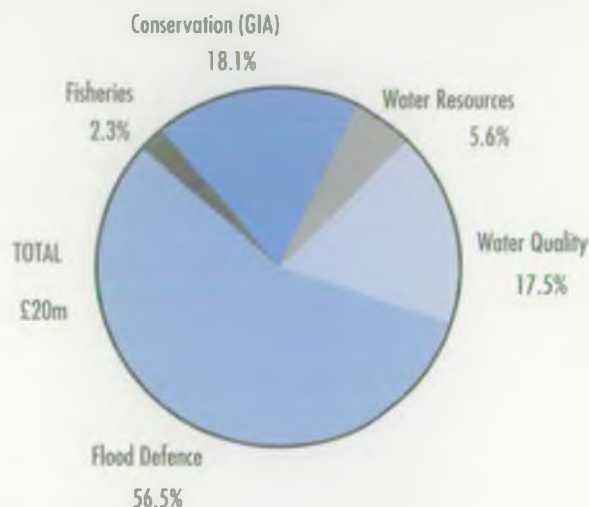


Figure 76 - Progress Against 94/95 Plan - Conservation**Real World Targets**

To ensure that conservation is fully taken into account when the Authority considers applications for abstraction licences, discharge consents, land drainage and fisheries consents.

Prepare, in collaboration with other functions, Catchment Management Plans in accordance with the agreed timetable.

Ensure surveys are carried out on 100% of schemes subject to SI 1217 (ie Environmental Assessment requirement).

To participate in around 100 collaborative projects for each of the plan years.

In liaison with other functions, appraise 100% of NRA capital works.

Progress

This has been successfully achieved. Conservation considered almost 9000 applications in this period.

The programme has been fully met. Conservation staff have fully contributed to Catchment Management Plans.

All schemes subject to SI 1217 have been appraised for their conservation impact.

172 collaborative projects involved conservation. This figure represents 70% of projects completed compared to 48% in 1993/94.

All NRA capital works have been appraised for their conservation impact.

Policy Targets

Complete development of the river habitat survey (RHS) system for evaluating river habitats and publish the methodology by March 1995.

Implement the RHS system of river habitat evaluation from June 1995.

Test and complete development of a standard method for environmental appraisal in the NRA and publish a good practice guide by March 1995.

Develop a standard approach for criteria applicable to fisheries, land drainage, discharge consents and abstraction licensing by March 1995.

Develop criteria to fulfil the NRA's statutory conservation duty toward archaeology and produce guidelines by March 1995.

Develop a consistent rationale for selecting priority sites for river rehabilitation by March 1996.

Contribute fully to the UK Biodiversity Action Plan through membership of the national steering group.

Progress

Development phase for field methodology completed. Training Manual available for surveys in 1995/96.

Working classification expected July 1995. Refinement and phased implementation approved.

Scoping guidance and handbook in advanced draft state. Testing by external developers will precede publication in early 1996.

Preliminary framework document drafted. Final draft expected in late 1995.

In-house R&D project completed on time. Guidance included in 1995 NRA Conservation Directory.

Progressing on target. The NRA is contributing to an EC LIFE demonstration project on river restoration during 1995-97.

National Conservation Officer represents the NRA on national steering group and targets sub-group.

Future Targets**Real World Targets**

- To ensure that conservation is fully taken in account when the Authority considers applications for abstraction licences, discharge consents, land drainage and fisheries consents.
- Prepare, in collaboration with other functions, Catchment Management Plans in accordance with the agreed timetable.
- To participate in around 250 collaborative projects for each of the plan years.
- In liaison with other functions, appraise 100% of NRA capital works.

Policy Targets

- Refine and implement the working classification for River Habitat Survey (RHS) from June 1995, ensuring that it is applicable on a UK wide basis.

- Produce a national inventory of river habitats for 1500 sites in England and Wales by December 1995.
- Produce technical guidance and a publicity leaflet on fisheries management and wildlife conservation by November 1995.
- Publish scoping guidance and a technical handbook on environmental assessment of major development types by March 1996.
- Develop a consistent rationale for selecting river rehabilitation by March 1996.
- Continue to contribute to the UK Biodiversity Action Plan through membership of the national steering group.
- Produce guidelines on the policy and operational implications of the EC Habitats Directive by September 1995.

Some examples of planned real world activities for Conservation are shown in figure 74 on page 50.

Figure 77 - Conservation Income and Expenditure

£k	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Income	28	28	2	26	9	9	9
TOTAL	28	28	2	26	9	9	9
EXPENDITURE:							
Revenue	2742	2951	3215	3027	2669	2669	2669
Capital	435	477	247	693	431	431	431
TOTAL	3177	3428	3462	3720	3100	3100	3100
VARIANCE - GIA	3149	3400	3460	3694	3091	3091	3091

Figure 78 - Conservation Staffing

FTE	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Total Conservation Manpower	65	85	87	86	86	86	86

Before 1994/95 Total Conservation Manpower represents complemented posts only. To improve our manpower controls we include all staff (ie complemented and uncomplemented) from Budget 94/95 onward.

Figure 79 - Conservation Outputs

Outputs and Performance	Actual 92/93	Actual 93/94	Forecast 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Length (km) of River Corridor Surveyed	7478	8205	5413	4970	4097	4097	4097
Number of Applications Screened:							
- NRA consent applications	-	-	8678	9921	10006	10006	10006
- NRA works	-	-	3604	3884	3868	3868	3868
- Local Authority consultations	-	-	9739	9556	9815	9815	9815
TOTAL	6537	14999	22021	23361	23689	23689	23689
Number of Improvement Projects	318	270	338	349	346	346	346
Number Involving External Collaboration	236	129	247	256	254	254	254
% Involving External Collaboration	74%	48%	73%	73%	73%	73%	73%

Before 1994/95 we did not record Number of Applications Screened by the categories shown here

NAVIGATION

Introduction

The NRA, with responsibility for more than 800km of inland waterways on which almost 40000 boats register annually, is one of the three largest inland navigation authorities in England and Wales. It also has harbour authority responsibilities at the Harbour of Rye and Dee Estuary. With annual expenditure of £6.0m the NRA maintains and manages important resources of local and national importance. The environment, atmosphere and heritage enshrined in these waterways attracts more than 12 million day visitors each year.

The Authority currently undertakes operational activities in respect of navigation in five of its Regions, including lengths of the river Thames, the Medway, several Anglian rivers, the Lower Derwent, Market Weighton Canal, Dee Estuary and Harbour of Rye. In 1994 we were directed to assume additional responsibility for the Dee and expenditure has to be found from existing GIA allocations. The NRA Board has agreed in principle that the NRA should, subject to Secretary of State approval, become the statutory navigation authority for the river Wye.

Each of these navigations was created by a unique piece of legislation which affects the manner in which they are managed and can constrain the NRA's ability to finance its operations.

Aims And Objectives

Our aim is to:

- improve and maintain inland waters and their facilities for use by the public where the NRA is the navigation authority.

Our objectives are to:

- contribute to the development of an overall navigation strategy for England and Wales;
- regulate NRA navigation through the enforcement of a consistent series of licences, orders, byelaws and statutes;
- maintain and improve the NRA navigation fairway, facilities and standards;
- recover from users the costs of providing specific navigation facilities and a reasonable proportion of the costs of maintaining the navigation.

Key Issues

Harmonised Charging

A trial arrangement to ease and encourage inter-regional boating has been introduced in 1995. More substantial changes to charging schemes to meet customer requirements and achieve efficiency savings will require amendments to primary legislation by promotion of a Transport and Works Act Order. Detailed consultation with customers will take place before we determine what action to take.

Liaison and collaboration

We will continue to work with other navigation authorities at a national and local level in order to improve the inland waterways network. Discussion and research will continue with British Waterways (BW) to establish reciprocal licensing arrangements.

Finance

Further reductions in GIA are planned. The outputs of a fundamental review of navigation will be used to improve efficiency, target resources, increase income and develop a realistic funding regime.

DoE consultation on NRA and BW navigation responsibilities

We will provide a response to the consultation report in June 1995. Since the publication of our navigation strategy in 1993 we have stressed the need for a national strategy to encompass all the inland waterways of England and Wales. We will continue to press for this approach and highlight the value of liaison and collaboration between navigation authorities.

Figure 80 - Progress Against 94/95 Plan - Navigation**Real World Targets**

To allocate 10% of the navigation capital budget to the provision of new facilities.

To undertake 13 improvement or new structures projects in 1994/95.

Prepare, in collaboration with other functions, Catchment Management Plans in accordance with the agreed timetable.

Inspect 90% of licences of all licensed craft.

Progress

13% of the original capital budget was used for the provision of new facilities.

22 new structures projects were undertaken in 1994/95.

The programme has been met. Navigation have fully contributed to Catchment Management Plans.

In 1994/95 39 thousand boats were registered in our three main navigation regions (Anglian, Thames and Southern). There is a high overall compliance rate of 99%.

Policy Targets

Review navigation activities and their financing and develop a strategic approach to increase income, improve efficiency, target resources, and justify GIA by November 1994.

Implementation of Boat Safety Scheme inspections by April 1995.

Develop a more detailed understanding of the customer base, particularly the significance of 10 million plus recreational visitors.

Progress

A detailed Navigation Activities Review took place during 1994/95 and involved ten specific areas of work. Some results from the work were used in 1994/95. The complete results will be analysed and utilised in 1995/96.

The Scheme is being developed in conjunction with British Waterways and the training modules for inspectors are still being developed. Subject to legal constraint the scheme will become operational from 1997.

A detailed Economic Appraisal of the benefits derived from the NRAs navigation function was completed. As a result an R&D project was commissioned to study the relationship between price and demand for boating.

Use Of Resources**Income**

Income from navigation is derived from two sources, licence and registration fees and GIA. Licence fees and registrations represent the contribution made by the direct paying users of navigations towards maintenance and renewal of assets and enforcement of regulations. GIA makes up the difference between this income and total expenditure.

All regions have experienced a downward trend in numbers of boats registered since 1990/91. The number of licensed craft shows a decline of about 7% since 1992/93. This is a reflection of general economic conditions and may also indicate that previous price increases have been detrimental to participation. The pricing strategy for 1995/96 has sought to slow or reverse this trend, resulting in lower than planned increases in charges. For 1996/97 and beyond we are planning to increase total income by 5% each year. This will achieve the target of 60% self financing as agreed in our 1994/95 Corporate Plan.

As a result total income is reduced from previously planned levels and GIA support has been increased to maintain expenditure. This still represents a significant decrease in expenditure from levels seen in recent years.

Bearing in mind the need to adopt a more commercial approach towards income generation a number of measures have been put in place:

- A marketing strategy has been designed to increase the number of boat registrations.
- An R&D study has been commissioned to assess the impact of price increases and develop a sensitive pricing policy.
- The Navigation Activity Review will be completed and indicate whether and where expenditure can be reduced and will fully analyze the funding needs and charging implications.
- A review of licensing and charges is included in our market testing programme for 1995/96.

Expenditure

At present total expenditure is planned to remain at around £6m per annum and assumes achieving income forecasts and maintaining GIA. This is more than 25% less than actually committed in 1992/93 and is considered the lowest level we can sensibly move to.

Capital expenditure of about £2m will only allow a limited programme of refurbishment to locks suffering structural failure and some minor works including moorings and landing stages. It will not permit major works, currently estimated at £2m per annum, which are required on the Medway and Thames to protect assets from deterioration. If not carried out, this could lead to further costs in the future.

Revenue expenditure of some £4m per annum will allow essential maintenance, operational and enforcement work to continue. We will continue to look for efficiencies and provide value for money.

Future Targets

Real World Targets

- To introduce an inter-Regional reciprocal visitor licence from 1st April 1995 until 31st December 1995 and review success.
- To respond to the DoE consultation document on the review of British Waterways and NRA navigations by June 1995.
- To hold in conjunction with BW and the Broads Authority a seminar for Inland Navigation Authorities in May 1995.
- Ensure 90% craft licence / registration compliance.
- To assess and initiate appropriate action for 90% of reports of navigation incidents and where emergency attendance is required attend within target time.

- To allocate 10% of the navigation capital budget to the provision of new facilities.

Policy Targets

- To continue development of the Boat Safety Scheme with British Waterways and implement the Scheme within the NRA during 1997.
- To complete the Navigation Activities Review priority planning exercise and asset maintenance plan by July 1995.
- To consult users on the introduction of a harmonised charging scheme and determine whether to proceed with amendments to primary legislation by January 1996.
- To create a marketing strategy which will raise awareness of the NRA's navigations and the opportunities they can provide for land and water-based recreation by May 1995.
- To undertake research into price / demand relationships.

Some examples of planned real world activities for Navigation are shown in figure 74 on page 50.

Figure 81 - Navigation Income and Expenditure

£k	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
INCOME:							
Boat Licences	2220	2306	2390	2452	2575	2704	2838
Tolls	195	205	160	103	109	114	120
Other	851	692	827	910	956	1002	1052
TOTAL	3266	3203	3377	3465	3640	3820	4010
EXPENDITURE:							
Revenue	4727	4829	4041	3719	3724	3866	4004
Capital	3699	2954	1999	2505	2200	2200	2200
TOTAL	8426	7783	6040	6224	5924	6066	6204
VARIANCE - GIA	5160	4580	2663	2759	2284	2246	2194

Figure 82 - Navigation Staffing

FTE	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Total Navigation Manpower	80	79	85	84	84	84	84

Before 1994/95 Total Conservation Manpower represents complemented posts only. To improve our manpower controls we include all staff (ie complemented and uncomplemented) from Budget 94/95 onward.

Figure 83 - Navigation Outputs

Outputs and Performance	Actual 92/93	Actual 93/94	Forecast 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
ENFORCEMENT and REGULATION							
Thousands of Licensed Craft	40	41	39	37	37	37	37
Thousands of Licence Checks	759	767	779	780	780	780	780
Number of Licence Offences	1897	1756	1331	1385	1385	1385	1385
% Licence Offences	0.3	0.2	0.2	0.2	0.2	0.2	0.2

RECREATION

Introduction

The NRA has a duty to promote recreation and a duty to take account of recreation in the performance of all its functions. The code of practice on Conservation, Access and Recreation issued by the Secretary of State gives practical guidance to the NRA and promotes desirable practices with respect to the NRA's environmental and recreational duties.

The NRA owns and manages over 1000 recreation and amenity sites across England and Wales. They range from the Thames Barrier Visitor Centre to numerous facilities for angling, sailing, boating, walking, cycling, horse riding and other pursuits.

Aims And Objectives

Our aim is to:

- develop the amenity and recreational potential of inland and coastal waters and associated lands.

Our objectives are to:

- maintain, develop and improve recreational use of NRA sites;
- take account of recreation in proposals relating to any NRA function;
- promote the use of water and associated land for recreation purposes.

Key Issues

Site Management Plan Methodology

Our methodology for managing and developing sites will be field tested during 1995/96. Any revisions will be incorporated for the next plan year.

Training

A foundation training course will be made available for all staff with recreation responsibilities and will form part of induction training for new staff. This will be complemented by topic specific training and is designed to increase competence and confidence.

Review of recreational policy in coastal zones

A working group will review how the NRA fulfils its recreation responsibilities in the coastal zone. In conjunction with other functions this will lead to policy recommendations for future action.

Finance

With further reductions in GIA we will seek to ensure that all advisory work is recharged to the function generating the work.

Canoeing

A new canoeist leaflet has been launched in May 1995. We will continue to support the multi-use of rivers and in our independent capacity will bring together interested parties in a National Angling and Canoeing Liaison Group.

Figure 84 - Progress Against 94/95 Plan - Recreation

Real World Targets

Collaborate with external organisations on at least 50% of NRA recreation projects.

Ensure the needs of recreation are included, where appropriate, in all Catchment Management Plans.

Along with Fisheries, Conservation and Navigation answer 80% of requests for advice within the target time of 20 days.

Progress

Recreation has carried out 62% of NRA projects in collaboration with external organisations*.

The programme has been met. Recreation have fully contributed to the Catchment Management Plans*.

Recreation has achieved 95% response to requests within target time*.

Policy Targets

Production of a Recreation Facility Design Manual.

Regional recreation strategy guidance notes.

Site management and survey methodology.

Progress

The manual was published in March 1995 and distributed to Regions. A training brief was issued to Regional Recreation contacts who introduced the manual to all relevant staff.

These guidelines were produced in May 1994. Four Regions have used these to produce draft Regional recreation strategies.

A site management plan methodology for recreation and conservation has been drafted and will be field tested during 1995/96.

* Provisional values

Use Of Resources

Income

Income for recreation comes from rents and leases for the use of those NRA sites with marketable values or sporting rights. These include sites with canoeing or fishing rights, and contribute about £400k to offset our spending. On some sites it is not possible or reasonable to charge for access. These include sites used for walking, picnicking, observation points and other types of informal recreation.

Expenditure

We have a statutory duty to take account of recreation possibilities in the work of all our core functions. The cost of these activities is recharged to the appropriate function. We do, however, need grant in aid of just over £1m per annum in order to support the full extent of our work.

There are three main work areas within recreation, namely screening (of NRA capital schemes, of applications to the NRA for licences and of planning consultations), management of NRA sites and liaison / promotion. We place particular emphasis on collaboration with other bodies as a cost effective means of promoting recreational use of the water environment.

The management of sites accounts for more than half of our spending, and includes maintenance of safety and access. Any further reductions in Grant in Aid will affect the NRA's ability to manage these sites for public access.

Future Targets

Real World Targets

- All NRA sites to be reviewed by 1996/97 for recreation potential.
- To publish 1994/95 Annual Conservation, Access & Recreation report and submit to the Standing Committee on Conservation, Access and Recreation by October 1995.
- Field Testing of Recreation Site Management Plan methodology during 1995/96.
- Development and delivery of a foundation training course in Recreation for staff that have direct recreation responsibilities.
- Answer 90% of requests for advice within target time of 20 working days.

Policy Targets

- Market testing recreation promotion activities. This will concentrate on collaborative projects.
- *Produce guidelines on Health & Safety aspects of recreation site management. This information will form an essential part of a site management plan.
- *Review of Recreation Policy in Coastal Zones.

* Subject to available resources

Some examples of planned real world activities for Recreation are shown in figure 74 on page 50.

Figure 85 - Recreation Income and Expenditure

£k	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Income	347	466	451	589	334	346	358
TOTAL	347	466	451	589	334	346	358
EXPENDITURE:							
Revenue	1817	1967	1781	1732	1370	1382	1394
Capital	185	564	352	423	330	330	330
TOTAL	2002	2531	2133	2155	1700	1712	1724
VARIANCE - GIA	1655	2065	1682	1566	1366	1366	1366

We plan to dispose of some NRA sites in 1995/96 which will provide extra "windfall" income in that year, and will lead to reduced income thereafter.

Figure 86 - Recreation Staffing

FTE	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Total Recreation Manpower	29	27	33	33	33	33	33

Before 1994/95 Total Recreation Manpower represents complemented posts only. To improve our manpower controls we include all staff (ie complemented and uncomplemented) from Budget 94/95 onward.

Figure 87 - Recreation Outputs

Outputs and Performance	Actual 92/93	Actual 93/94	Forecast 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Number of Projects	179	167	188	191	179	179	179
Number of Collaborative Projects	123	136	116	108	102	102	102
% of Collaborative Projects	69%	81%	62%	57%	57%	57%	57%

CHAPTER 6 - CULTURE CHANGE PROGRAMMES

Catchment Management Plans

Catchment management plans are fundamental to the NRA's corporate planning and delivery of our operations. Following the completion of our new area organisation, our 5 year programme of catchment management plans has been updated.

We remain committed to our target to complete all consultation reports by 1998 with all regions producing at least two plans per year. The published programme has been drawn up on a prioritised basis, which will be taken account of in future resource planning.

The benefits of producing catchment management plans are now being delivered and real world improvements being achieved. They fully complement our new, integrated structure and are proving to be an excellent medium for widespread local public consultation on all our functions and other environmental concerns.

The actions arising from these Plans are now being included in both NRA capital programmes and other external bodies' programmes of work, including local authorities' structure plans. The catchments for which we will produce consultation reports in 1995/96 are shown in figure 89.

Figure 88 - Timing of Catchment Management Consultation Plans

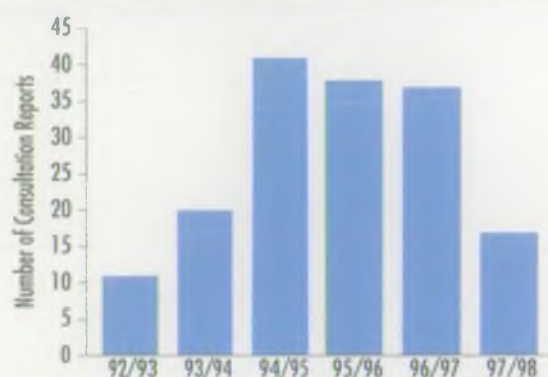


Figure 89 - CMP Consultation Reports Due in 1995/96



Citizen's Charter Action Plan

We were very pleased to be awarded the Charter Mark in 1994/95. We recognise the importance of now maintaining and improving the level of service we provide our customers. During 1995/96 we will continue to progress our detailed Action Plan outlined below.

Standards

Revise our current Customer Charter, taking account of customer feedback and revisions to service standards.

- Publish and promote NRA Customer Charter internally and externally. Consider production in large type / on tape for customers with visual impairment.

Continue to develop customer standards and performance measures.

- Monitor feedback on Customer Charter standards and recommend revisions where appropriate.
- Ensure compliance with principles of the Enforcers' Code.
- Consult Regional Committees on NRA performance against standards after first full year of operation.
- Incorporate revisions to core function standards as proved necessary by market testing studies.

Ensure compliance with standards (applies to all customer standards).

- Implement recommendations from Internal Audit report.
- Continue liaison with Cabinet Office / DoE / DTI to advise on policy developments.
- Provide advice to Environment Agency Board and liaise with HMIP and WRAs.

Information And Openness

Ensure full promotional potential is derived from 1994 Charter Mark award.

- Charter Mark to be built into NRA corporate identity and publications specification manual.
- Take advantage of relevant promotional opportunities.

Provision of services for customers with specific needs eg for people with disabilities and those whose first language is not English.

- Following full report in March 1995 on Minicom textphone pilot for deaf people in N&Y Region, implement agreed recommendations.
- Ensure full compliance with Welsh Language Act.
- Ensure NRA schemes and office/facility refurbishments take appropriate account of needs of disabled customers/employees in design phase (ie wheelchair access, facilities for people with hearing or visual impairment).

Choice And Consultation

Review Committee operation to identify areas for further improvement.

- Implement agreed recommendations arising from 1994 survey of Committee Members.

Build on R&D public perception survey for measuring NRA performance.

- Implement recommendations from R&D report.

Courtesy And Helpfulness

Continue with Customer Care programme.

- Ongoing programme of customer care surveys.
- Quality assurance of telephone response.
- "Sweep-up" receptionists training to allow for staff turnover in this area.
- Promotion work on awareness of internal customers and complaints system.

Putting Things Right

Review implementation of complaints procedure

- Implement findings of Internal Audit review.

Develop quarterly reporting on the nature of complaints received at HO, Regions and Areas.

- Implement findings of Internal Audit review.

Introduce independent review and appeals mechanism.

- Agree and establish independent complaints and conciliation scheme with Chartered Institute of Arbitrators.
- Implement agreed scheme.

Improve performance against standard for handling of complaints.

- National performance in 1993/94 averaged only 70% of complaints responded to within target of five days. Need to improve performance, with no loss of quality in responses.

Value For Money

Need to deliver planned efficiencies.

- Head Office/Regions/Areas to implement local efficiency measures in line with National and Regional programmes.

Environmental Policy

"The NRA is committed to the environmental principles of stewardship and sustainability. In addition to vigorously pursuing its statutory responsibilities as Guardian of the Water Environment, the NRA will aim to establish and demonstrate wise environmental practice throughout all its functions."

Progress in 1994/95

The NRA continued to pursue environmental management improvements throughout 1994/95. Particular achievements include:

- An Environmental Procurement Policy has been developed and implemented, with training provided for procurement officers.
- A range of environmental policy issues have been addressed that will provide best practice.
- Monthly articles on various environmental issues were produced for national and regional newsletters.
- Improvements in the quantity and quality of environmental performance data.
- Energy audits carried out on NRA buildings have led to efficiency measures and tariff adjustments saving about £350k per annum.
- Transport initiatives, such as badged fleet vehicles being replaced with diesel fuelled alternatives, have reduced consumption and costs by about £150k.
- An Efficient Driving project to reduce vehicle accidents, losses and fuel consumption and save about £450k per annum.
- Savings of over £60k by reducing consumption of paper and stationery.

Action Plan

The environmental policy is now regarded as a continuing activity with its philosophy built into all of our activities. The specific targets to be achieved by 31st March 1996, compared to usage in 1991/92 (unless stated otherwise), in pursuit of this policy are:

Minimise Resource Use And Waste

- Reduce energy directly consumed in NRA buildings, laboratories and transport by 15%.
- Continue to seek energy efficiency measures in relation to pumping.
- Improve fuel efficiency and reduce losses and damage to vehicles through efficient driver training.
- Introduce effective monitoring of fuel and accidents.
- Achieve 95% diesel vehicles in badged fleet.
- Reduce consumption of stationery (excluding paper) by 10%.
- Reduce consumption of stationery (excluding paper) by an additional 5% compared with 1994/95.
- Continue to recycle at least 60% of paper purchased.

- Ensure that all paper purchased for internal use and printing is recycled paper, totally chlorine free (TCF) and has a minimum of 50% C or D class of post-consumer waste.
- Reduce consumption of paper by 10%.
- Reduce consumption of paper by 5% compared with 1994/95.
- Implement, where practicable, systems for recycling plastics, tyres, batteries, bottles and corporate clothing.

Minimise Or Eliminate Practices Known To Be Harmful

- Implement policy on use of red and black list substances.
- Develop hardwood policy for NRA structures and flood defences.
- Implement policy to phase out the use of ozone depleters.
- Eliminate use of tropical hardwoods in office furniture.

Establish Effective Systems And Procedures To Support Implementation Of The Environmental Policy

- Implement findings from pollution risk audit of NRA sites.
- Introduce audit programme.
- Establish Environmental Steering Group liaison with contract development programme.
- Implement improved monitoring arrangements.
- Develop and implement a promotion and education campaign to heighten staff awareness of the policy.
- Develop and implement a grounds maintenance programme.

Training And Development

We will continue to place a high priority on training in order to increase organisational effectiveness and to support the process of change. As in previous plans, we will spend a sum equal to about 2% of our salaries and wages bill.

During 1994/95 we have developed the organisation of our training programme on a more national and corporate basis. This has provided greater prioritisation of national needs and a much more focused approach. Local training needs will continue to be met through local business units.

In 1995/96 the national programme will take up about £2.1m of the budget, around 65% of the total. This is a greater proportion than in 1994/95 and reflects an increased emphasis on training professional and technical skills and continuing attention to management development.

Our highly successful programmes for senior and middle managers (Ashridge and Sundridge) are substantially complete. The benefits of these courses are becoming evident throughout the authority, typified by very apparent shifts in attitudes and culture at these levels. We plan to extend the programme within the management hierarchy and hope to include representatives from our future partners in the Environment Agency.

Market Testing Programme

Our vision of market testing in the NRA is that it provides a value for money process intended to help us improve our efficiency and effectiveness whilst ensuring we focus maximum resources on protecting and improving the water environment.

The five year programme to critically examine all of our activities is well established and detailed in figure 90. This has been widely published across the NRA and regular communications are given to all employees.

The approach that we adopt to achieving value for money has been refined in light of the first two years experience. We now operate a two phase approach to firstly examine the strategic options available to each activity and secondly to implement the preferred option whether that be an internal efficiency review, test against the open market, negotiated takeover or management buyout. This approach gives us the flexibility necessary and provides market driven value for money. This system has been operated in 1994/95 and has been refined for 1995/96 and the remainder of the programme.

Progress Against Previous Plans

During 1994/95 we have undertaken reviews of all the activities outlined in our last Corporate Plan except for Information Systems which has been delayed pending the formation of the National IS Service which has, in itself, provided efficiency savings. Strategic options studies have been completed for all other activities with the NRA Board agreeing the recommendations put forward. These are:

- Hydrometry - retain in-house but seek efficiencies.
- Conservation corridor surveys - already substantially contracted out, no change.
- Coastal survey vessels - implement business needs review, reconsider market test on completion.
- Personnel - retain in-house but implement efficiency savings.
- Public Affairs - publishing and exhibitions to be exposed to external competition, internal efficiencies from remainder.
- Estates - all "client" activities to remain in-house, "provider" activities to be exposed to external competition on a regional basis where appropriate.
- Administration - undertake further efficiency review.
- Board and Committee Services - retain in-house but implement efficiency savings.
- Internal Audit - expose to full external competition.

The Executive Group also deferred a decision regarding market testing of Legal Services pending the presentation of revised proposals.

The decision regarding Internal Audit was taken early in the year which allowed time for the exercise to be completed before the end of the financial year. It is pleasing to report that the in-house team were successful in retaining the business and potential savings of £400k per annum have been identified, with a direct cost reduction of some £100k being achieved from the beginning of 1995/96.

For the other activities work is now underway to implement the efficiency reviews leading to savings in 1995/96 and beyond. The financial effects of the programme are already built into the base budgets of the NRA.

Future Plans

Work has already started on those activities in the 1995/96 programme following the process outlined above. It is intended to complete the strategic options reviews by the end of the summer and consult the Environment Agency Advisory Committee regarding the outcomes as well as the NRA Board. This is because the year of implementation will be 1996/97, the first year of the Agency.

As a result of the 1994 PES announcement we have already suffered a further cut of £1m in GIA which will have to be absorbed. In addition Government should be aware that in the lead up to, and early stages of, the Environment Agency there will be increasing demands upon our resources, possibly causing an unavoidable delay in the delivery of further savings. From our initial planning assumptions additional savings of some £3m in 1997/98 have not yet been taken out of base budgets and only a proportion of which falls to GIA. As a result of these facts we would urge Government not to take as read the delivery of a further reduction in our budget.

Figure 90 - 5 Year Market Testing Programme

	1993/94	1994/95	1995/96	1996/97	1997/98
WATER QUALITY					
Bacteriology	●●●●				
Chemical Laboratories	●●●●				
Marine Survey Vessels		●●●●			
Waste Disposal Site Licences			●●●●		
Routine Sampling			●●●●	●●●●	
Routine Reports				●●●●	
Biological Surveys				●●●●	
Archive Maintenance				●●●●	
Site Inspections					●●●●
Consent Determination and Administration					●●●●
Enforcement Sampling					●●●●
Pollution Incident Response					●●●●
WATER RESOURCES					
Hydrography		●●●●			
Abstraction Inspections			●●●●		
Water Resources Operation			●●●●		
Planning				●●●●	
Abstraction Licensing					●●●●
Groundwater Management					●●●●
FLOOD DEFENCE					
Drainage & Flood Maintenance	●●●●				
IHWf > EWF	●●●●	●●●●			
Design	●●●●				
Emergency Work Force		●●●●	●●●●	●●●●	
Capital Programme Management			●●●●		
Technical Liaison				●●●●	
Maintenance Programme Management					●●●●
Land Drainage Consents					●●●●
Flood Prediction and Warning					●●●●
FISHERIES					
Harbour Improvement			●●●●		
Fisheries Laboratory Services			●●●●		
Stocking			●●●●		
Fish Farms			●●●●		
Poaching Control				●●●●	
Licence Enforcement				●●●●	
Fish Kills / Rescues					●●●●
Surveys					●●●●
CONSERVATION					
Corridor Surveys		●●●●			
Scheme Promotion			●●●●		
NRA Operations Advice			●●●●		
Landscaping			●●●●		
NRA Owned Site Plans				●●●●	
Authorisations Input					●●●●
RECREATION					
Information Promotion			●●●●		
NRA Owned Site Plans				●●●●	
Authorisations Input					●●●●
NAVIGATION					
Licensing and Charges			●●●●		
Operation				●●●●	
Improvement					●●●●
Maintenance					●●●●
SUPPORT SERVICES					
Committee and Board Services		●●●●			
External Affairs		●●●●			
Estates		●●●●	●●●●		
Legal		●●●●	●●●●		
Information Systems		●●●●	●●●●		
Licence Sales		●●●●			
Public Relations		●●●●			
Personnel		●●●●	●●●●		
Administration		●●●●	●●●●		
Internal Audit		●●●●			
Discharge Charging			●●●●		
Finance			●●●●	●●●●	
Transport Management			●●●●		
Procurement			●●●●		
Abstraction Charging			●●●●		
Research and Development Management				●●●●	
MULTIFUNCTIONAL					
Corporate Planning			●●●●		
Market Testing Unit			●●●●		
Catchment Management Plans			●●●●		
Economic Benefit Analysis				●●●●	
Town and Country Planning Liaison				●●●●	
Environmental Impact Assessments				●●●●	

CHAPTER 7 - SCIENTIFIC AND TECHNICAL SUPPORT

Information Systems

Mission

We aim to provide effective information systems and services by planning, developing and delivering services to meet the business needs of the NRA in its mission to improve the water environment. We will be business like, efficient and caring towards our employees.

Aims

Costs and benefits: optimise IS expenditure to maximise business benefits.

Project Prioritisation: ensure IS projects are aligned to achieve the NRA's overall Mission and Aims.

Systems Development: focus on developing business driven national systems to reduce diversity of existing systems and those provided by Water Companies (PLCs).

Hardware and Operating Software Standards: in place to reduce diversity of equipment and support costs.

Systems and User Support: provide effective IS services and support to our internal customers via appropriate service level agreements (SLAs).

Management: through the National IS service continue to reduce operational and staff costs.

Market Testing: IS continues to deliver value for money, in the change to client / contractor organisation, monitoring of service costs and identification of options for market testing.

Environment Agency: all improvements are reviewed to ensure IS requirements are fully incorporated in planning of the Environment Agency and to define, plan, develop and implement the required IS systems and structures.

Progress Against Aims and Plan

Several initiatives developed to optimise IS expenditure have been implemented, the most significant being the creation of a National Information Systems (NIS) service.

NIS has been organised into three functions which develop a contractor / client relationship within the NRA:

- NIS Corporate Services represents the client side. It acts on behalf of the NRA to specify the content, level and cost of the IS services required, including the monitoring of these services.
- NIS Technical Services represents one part of the contractor side. It provides all operational services to its clients within

the NRA to standards agreed in locally determined SLAs.

- NIS Development Services represents the other part of the contractor. It provides all new software development services and the maintenance of current applications.

IS projects are approved by the EG Priorities Sub-group (EGPSG) and monitored by the IS Project Assessment Board (ISPAB), with support from NIS Corporate Services. This process ensures that IS projects and expenditure are prioritised and focused within the NRA's overall business plans and priorities.

Support for the existing applications has been reduced by cutting the number of applications by 15%. A number of PLC service contracts have been terminated or reduced by the value of £2.5m.

Standards and procurement contracts are in operation for all computer hardware, communications equipment and software and have contributed savings to both operating and project costs.

The reorganisation of the IS function from a regional to a nationally managed and regionally delivered service has contributed to a £2.9m reduction in operating costs. It will continue to improve the monitoring and value for money of the IS service within the NRA.

All major projects and new contracts have been, and continue to be, reviewed with our potential future Agency partners. This has ensured that there is no nugatory expenditure.

Progress on the major national projects has been continuing to plan and the following activities have been completed:

Integrated Accounting System (IAS). The approval for the full implementation of this system has been granted and the pilot implementation completed. Implementation in all regions will be completed in 1995/96.

Personnel and Payroll Systems (P&P). The procurement process for the acquisition of these systems has been completed and the contract for supplying these systems has been awarded. Implementation in all regions will be completed in 1995/96.

Water Archive and Monitoring System (WAMS). The contract for this system, design, build and implementation, has been approved and awarded. The design and build stages have been completed, with implementation to be completed in 1995/96.

The full Business Cases against agreed business requirements have been approved along with the approval to build and pilot

Figure 91 - Information Systems Expenditure and Staffing

£m	Actual 1992/93	Actual 1993/94	Budget 1994/95		Planned 1995/96	Estimate 1996/97	Estimate 1997/98
			Original	Revised			
Ongoing Support and Maintenance	29.0	25.3	25.0	24.1	18.7	18.7	18.7
Strategy Development	2.8	3.3	4.0	3.0	5.3	3.0	3.0
Strategy Implementation	-	8.0	10.3	8.2	8.3	9.8	10.3
Regional Development Initiatives	4.7	4.1	3.9	5.0	5.0	5.8	5.3
Income	(0.2)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
TOTAL	36.3	40.4	42.9	40.0	37.0	37.0	37.0

FTE	1994/95	1995/96	1996/97	1997/98
Total IS Staffing	194	174	174	174

implementation in 1995/96 for these projects:

- National Abstraction Licensing Database (NALD);
- Flood Defence Management System (FDMS);
- Office Systems (E-Mail).

To ensure that resources are available for the implementation of the major projects the following systems have been placed on hold:

- National Planning Applications System (NPAS);
- National Incidents and Prosecutions System (NIPS);
- Laboratory Information Management System (LIMS).

1995/96 Targets and Efficiency Savings

- To implement WAMS in all regions and IAS and P&P in head office and all regions.
- With the implementation of the major projects and using the new national contracts, continue to reduce the number of differing hardware platforms and software applications supported, by 31 March 1996.
- With the introduction of the new National IS Service continue to reduce support costs and staff numbers by 10%, focusing these savings on the implementation of National Applications.
- To continue to improve services to all NIS customers.
- Ensure that the planning and preparation for the future Environment Agency is resourced and that the necessary changes in applications and infrastructure are in place for vesting day (1 April 1996).

Research And Development

Aims

The NRA has a statutory duty under the Water Resources Act (1991) to:

"... make arrangements for the carrying out of research and related activities in respect of matters to which the functions of the Authority relate".

The NRA's principal aims in relation to R&D are to:-

- improve the operational efficiency and effectiveness of the NRA; and
- ensure that its policies and practices are based on a strategic scientific and technical assessment of the issues which lie ahead.

Operational activities also require effective techniques, best practices and tools if the best use is to be made of the NRA's resources. In addition, the NRA will always be under pressure to carry out more work as further environmental issues come to the fore. Research is, therefore, essential if these new and often complex issues are to be dealt with in an effective manner whilst demonstrating value for money.

Primary Purposes of R&D Projects (1995/96)

Operational Efficiency	52%
Policy Development	11%
Statutory Duties	24%
Underpinning Knowledge	13%

Progress against Plan

Significant progress has been made in 1994/95 towards the aim of harmonising the NRA's R&D Programme with those of HMIP, DoE Waste Technical Division and DoE Contaminated Land and Liabilities Division. In addition to ensuring that duplication is kept to a minimum, the EAAC R&D Working Group has also produced a register of publicly funded environment-related R&D which will assist in the planning of R&D for 1996/97.

Collaboration with other organisations and countries has also featured strongly in 1994/95. Memoranda of Agreement have been agreed with SNIFFER (Scotland and Northern Ireland Forum for Environmental Research) and NERC, and links have been established with Irish Environmental Protection Agency. A number of proposals have also been submitted for collaboration with the European Union's Fourth Framework R&D Programme.

The principal achievements of the R&D programme in 1994/95 were as follows:

- developed and started 60 new projects;
- completed 100 projects or phases of projects, the vast majority of which are being implemented without the need for additional resources;
- completed and implemented the results of reviews of R&D in four programme areas;
- implemented improved arrangements for disseminating outputs to the public;
- published seven major reports on R&D projects;
- produced Annual R&D Review - 1994;
- collaborative funding of over 25 % achieved
- produced List of Outputs 1989 - 1994.

Targets

In common with the NRA as a whole, the focus of many R&D activities will be to deliver outputs of use to the Environment Agency. In this respect, the completion of projects in 1995/96, together with the integration of management systems with the future Agency partners will feature strongly in the coming year.

The specific targets for this period are:

- develop 52 new projects in support of key NRA developmental initiatives and continuing activities;
- complete 60 projects and agree appropriate implementation plans;
- publish six R&D Reports;
- publish the Annual R&D Review for 1995;
- achieve external funding of the programme of 20%.

In addition to these specific targets the R&D Service will also:

- continue to work with the Environment Agency Advisory Committee in laying out the basis for the Agency's R&D Programme, including advising on its desirable content;
- agree Concordats with other Research Councils such as Engineering and Physical Sciences Research Council;
- provide an end-user perspective on proposed Research Council programmes;
- investigate options for improving the implementation of R&D outputs;
- implement a training programme for staff involved in R&D management.

Key Initiatives

The principal initiative concerns the planning of an effective, user-directed and output-driven R&D programme for the Environment Agency. The lead time in R&D is such that effective planning at this stage will ensure that usable outputs are available to future Agency staff earlier than might otherwise be the case.

The publication of the White Paper on Science and Technology set the scene for the future of publicly-funded R&D undertaken

by the Research Councils. The NRA, as an end-user of this research, will play an important role in translating this basic and applied research, into practical outputs in order to improve the environment. The negotiation of agreements with the Research Councils having an interest in the environment, and the subsequent defining of commonly-agreed programmes of R&D will represent an important step in ensuring better value for money.

Spending Plans

All projects in the NRA's R&D programme are justified against the strategies and business plans of its core functions. New start projects in 1995/96 all support, and have been prioritised against, the NRA's "Must Do", "Progress" or priority continuing activities.

The planned budget for the 1995/96 programme has been set at £6.9m, around 1.5% of the total NRA budget. The manpower resources, drawn from core function staff as Commissioners, Topic Leaders and Project Leaders, required to carry out this programme equates to 14 full time equivalents, representing the same level as for 1994/95.

Value for Money

Project Appraisal

Individual projects will continue to be appraised on a project-by-project basis in accordance with Treasury guidelines and NRA Project Management Procedures to ensure effectiveness and value for money. As part of the process, the future output, its benefits including net present value and means of implementation are clearly identified before the project is authorised. At present, all non-collaborative projects over £100k are reviewed by an independent external expert prior to the contract being finalised.

Outputs

Due to the change in procedures for signing off and implementing R&D outputs, the number reported in 1993/94 was relatively low. However, 1994/95 saw a significant increase, with in excess of 100 outputs being produced. Each output was accompanied by an implementation statement and where resources were required, an implementation plan produced.

Key outputs produced in 1994/95 include an interim manual for assessing the benefits of water quality improvements. This output was jointly funded with OFWAT, DoE, Water Services Association and Foundation for Water Research. A further output from FWR, the Urban Pollution Manual, was launched by the Environment Minister Robert Atkins in December 1994, and will provide a commonly held method for determining the best improvements to sewerage systems.

A review of the status of rare fish was published by the NRA through HMSO following work carried out by the Institute of

Figure 92 - Numbers of R&D Projects, Including External Funding Position

	1993/94		1994/95		1995/96	
	Total	With External Funding	Total	With External Funding	Total	With External Funding
Water Quality	69	33	94	44	105	56
Water Resources	20	4	23	8	27	12
Flood Defence	40	7	37	8	35	17
Fisheries	20	-	15	1	24	3
Conservation	14	1	16	2	21	10
Recreation and Navigation	4	1	4	2	6	5
Cross Functional Issues	14	3	16	4	25	12
TOTAL	181	49	205	69	243	115

Note The Figures provided for 1995/96 include proposed projects where funding from other research commissioning organisations may be forthcoming during the year. Number of projects for 1995/96 includes projects which end during the year.

Figure 93 - R&D Staffing

FTE	Actual 90/91	Actual 91/92	Actual 92/93	Actual 93/94	Forecast 94/95	Planned 95/96	Planned 96/97
R & D Staff	11	14	15 ⁽¹⁾	15	15	15	15
Core Function Input	18	18	18	18	14	14	14
Contract Staff	-	-	4	3	4	4	4
TOTAL	29	32	37	36	33	33	33

(1) - Includes one uncomplemented FTE from 1992/93 onwards.

Figure 94 - R&D Expenditure

£m	Actual 90/91	Actual 91/92	Actual 92/93	Actual 93/94	Forecast 94/95	Planned 95/96	Planned 96/97
Commission - Function							
A - Water Quality	3.9	4.7	3.5	2.6	2.7	2.9	2.9
B - Water Resources	0.6	0.9	0.6	0.5	0.6	0.7	0.7
C - Flood Defence	0.5	0.9	0.9	0.8	0.7	1.0	1.1
D - Fisheries	0.4	0.5	0.5	0.5	0.4	0.5	0.5
E - Recreation and Navigation	0.0	0.0	0.1	0.1	0.1	0.1	0.1
F - Conservation	0.1	0.2	0.2	0.2	0.2	0.5	0.5
G - Cross Functional	0.0	0.2	0.1	0.2	0.5	0.3	0.3
TOTAL	5.6	7.4	5.9	4.9	5.2	6.0	6.0
Technical Services	0.2	0.2	0.4	0.4	0.5	0.4	0.4
Research Fellowships	-	0.0	0.1	0.1	0.1	0.1	0.1
R&D Management	0.2	0.2	0.4	0.3	0.4	0.4	0.4
TOTAL R&D SUPPORT SERVICE	5.9	7.9	6.8	5.7	6.2	6.9	6.9

There may be minor arithmetical differences in this table due to rounding.

Freshwater Ecology. The study of freshwater fish in England and Wales provided useful information on species such as Vendace.

The NRA also published an assessment of the likely future demand for irrigation water. This study assessed the future demand scenarios for different parts of England and Wales under a range of policy options.

Staffing

1995/96 will see the establishment of the National R&D Service. This will ensure that the eight regionally-based R&D Coordinators will be able to contribute to the development of R&D initiatives on a national basis, thereby making better use of existing resources.

The appointment of a number of Topic Advisors to assist in areas of particular importance has been a considerable success

Figure 95 - R&D Output and Performance

	Actual 90/91	Actual 91/92	Actual 92/93	Actual 93/94	Forecast 94/95	Planned 95/96
Projects underway at year end	120	134	142	84	125	115
New projects started during the year	101	78	83	57	103	161
On-going projects		23	25	67	88	125
Projects or phases completed during the year	35	78	101	40	100	171
Average size of project (£k/annum)	42	46	44	75	75	57
R&D budget as % of total NRA	1.6	1.8	1.9	1.7	1.5	1.5
% external funding	8	10	10	15	25	20

Note: The number of ongoing and new projects for 1995/96 includes an element of overprogramming and will be managed within the overall resources provided.

and will continue to be pursued in 1995/96. These external scientific and technical experts provide high level support to Topic Leaders as well as an external view of the current scientific base upon which the NRA may wish to draw.

The R&D Programme has reached an optimum and sustainable level at present with the 14 FTE of core function staff provided in the roles of Commissioners, Topic Leaders and Project Leaders being fully utilised. This optimum level is also evident from the number of outputs now being taken up by core function staff. However, it is recognised that in 1995/96, a year of significant change for the organisation as a whole, the provision of core function support to the R&D programme will be essential if outputs are to be delivered for the Environment Agency.

Laboratory Services

1994/95 has been the first full operational year of the National Laboratory Service. It has not been without its difficulties but there have been a number of notable successes.

The transfer of workloads from the old network of 11 laboratories to the present 6 has been completed. This went smoothly for North West and Welsh regions but there were difficulties in meeting service levels for Thames, Southern and Anglian regions. These problems have been tackled during the year to improve future service delivery.

Following internal competition financial and personnel services are now provided by Anglian region. This has proved effective and operated with minimum difficulty.

One major success related to the pollution incident affecting the River Severn and associated water supply abstractions. Through our prompt involvement an obscure organic pollutant was identified very rapidly.

In addition, the major financial savings stated in the original "Value for Money" report have been achieved. Accumulated savings compared with the 1992/93 baseline already exceed £3m. It is anticipated that additional savings can be made as the original workload estimates have been revised downwards.

Following reviews of sampling programmes (most notably in South Western region) the defined workload for 1995/96 is 4.3m analytical determinands compared to original estimates of 5.7m. This should translate into additional savings of some £0.8m per annum but will not result in any further rationalisation of the laboratory network.

The creation of the Environment Agency will potentially increase the volume of analysis required and change the nature of some of the work currently undertaken. The technical resource and financial implications of any change will need to be carefully considered.

Figure 96 - Laboratory Inputs and Outputs

	Actual 93/94	Forecast 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
Total Expenditure (£m)	16.2	14.4	13.3	13.8	14.3	14.8
Total Staffing (FTE)	294	319	313	311	311	311
Samples Analysed (thousands)	133	115	123	125	125	125
Determinands (millions)	5.7	5.0	4.3	4.3	4.3	4.3

Health And Safety

The first year of the National Health and Safety Service has seen a number of successful training events. These have enabled the regions, areas, internal business units (IBUs) and laboratories to move to more self-sufficient and effective operational units.

In particular the nationally recognised "Certificate in Managing Safely" has been introduced and we have been accredited as an examination centre for the course. This will be extended and continued in 1995/96.

We have introduced, trained and supported 56 regional, area, IBU and laboratory Health and Safety Co-ordinators and developed a revised Health and Safety policy document. This has been issued as an easy to read and understandable policy manual.

We will continue to build on the success of the reorganisation and deliver a strategic Health and Safety service backed up by properly trained personnel in the field.

Procurement

During 1994/95 we have built upon the successful formation of our National Procurement Service. In particular we have:

- achieved savings from contract development activity of £2.5m;
- increased the value of national contracts in place to £50m;
- trained over 200 staff in procurement and contract management;
- developed and implemented a Procurement Business Plan;
- developed and introduced an Environmental Procurement Policy.

For 1995/96 our principal aim will be to continue to improve the delivery and cost effectiveness of procurement services in order to provide the best possible value for money to the NRA. Specific aims for the year ahead include:

- continued pursuit of savings with a target of £3m for 1995/96;
- take account of needs of the Environment Agency in terms of policy, procedures and contract development;
- increase the level of procurement support to civil engineering contracting.

Information Centre

We have established an Information Centre based at our Bristol Head Office. This was intended initially to provide an information service for staff who are involved with national activities or have information needs beyond those able to be met regionally.

Information is provided in a variety of forms including; access to books, institutional publications, reports from key organisations, journals and newspapers, external data bases (including the Internet) and maps. The Information Centre holds around 8500 volumes and access is also provided to other NRA libraries and many external collections including Government, water industry and institutional libraries.

We will continue to enhance the service we provide as we move towards the Environment Agency. In particular during 1995/96 we plan to extend the national service to all staff in the regions encompassing literature searching, loans of nationally relevant publications and an awareness service. In addition we will assume a training and co-ordination role for implementation of services in regions currently without library and information services.

CHAPTER 8 - EFFICIENCY AND VALUE FOR MONEY

Realistic Spending Plans

Our expenditure plans for 1995/96 and later years remain broadly in line with those planned for in our last Corporate Plan. As a result of the 1994 PES announcement our GIA for all plan years has been reduced by £1m. We have managed to absorb this further reduction principally due to planned increases in fisheries income and greater efficiency in our water quality programme. Revisions to our sampling programme and greater efficiencies in our national laboratory service have allowed us to maintain the priority given to our water quality work and protect other functions, in particular fisheries and navigation, which have already suffered reductions in expenditure as a result of previous PES settlements. Action taken to reduce the number of single tender actions and cut losses due to theft have also helped improve our efficiency.

We have honoured our previous commitment to keep increases in our principal charging schemes at inflation or less. We plan to continue this trend throughout the plan period. As a result of using spare balances on our water resources and flood defence accounts during 1994/95 there is a return to a more standard charging profile from 1995/96 onwards.

As a result of the successful contract with Post Office Counters Ltd, which increased rod licence availability and reduced the risk of bad debts, fisheries income is planned to increase at a slightly faster rate than previously planned. In addition we are exploring ways in which we can increase income for our work on migratory salmonid fisheries in 1996/97. These shifts have allowed expenditure to remain at previous plan levels whilst reducing dependency on Government grant.

Navigation income is now planned to rise more slowly as a result of a reduction in the number of licences. Realistic increases in income of 3% for 1995/96 and 5% thereafter have been assumed rather than planning for unattainable, larger increases in boat licence fees. Coupled with this we intend to adopt a more commercial approach towards income generation and still achieve the target of 60% self funding.

Proposals for revisions to our car policy have recently been submitted to the DoE. While we are awaiting DoE and Treasury approval no financial implications have been built into current budgets.

Further and more detailed commentary on the income and expenditure plans of each core function appear in chapter 5.

Figure 97 - Income, Expenditure and Grants

INCOME (£m)	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
CORE FUNCTIONS							
Water Quality	39.3	46.3	46.0	46.4	47.9	49.5	51.3
Water Resources	77.7	81.2	65.7	82.9	84.5	87.5	90.5
Flood Defence	204.6	193.3	167.5	185.9	200.2	207.2	214.5
Fisheries	10.7	11.2	12.5	13.4	13.8	14.3	14.8
Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Navigation	3.3	3.2	3.4	3.5	3.6	3.8	4.0
Recreation	0.3	0.5	0.5	0.6	0.3	0.3	0.4
Sub-Total	335.9	335.7	295.6	332.7	350.4	362.7	375.4
GOVERNMENT GRANTS							
DoE Grant-in-Aid	71.1	71.2	67.9	58.9	56.9	56.9	56.9
MAFF / Welsh Office Capital Grants	34.5	34.5	39.7	42.4	49.4	49.4	49.4
Sub-Total	105.6	105.7	107.6	101.3	106.3	106.3	106.3
TOTAL	441.6	441.4	403.1	434.0	456.7	469.0	481.7
EXPENDITURE (£m)	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
CORE FUNCTIONS							
Water Quality	75.0	83.1	88.1	84.4	86.0	87.7	89.5
Water Resources	77.6	72.4	75.4	76.3	76.5	78.8	81.2
Flood Defence	227.8	231.8	242.0	249.4	261.8	256.6	263.9
Fisheries	23.3	25.5	21.6	21.8	21.3	21.8	22.3
Conservation	3.2	3.4	3.5	3.7	3.1	3.1	3.1
Navigation	8.4	7.8	6.0	6.2	5.9	6.1	6.2
Recreation	2.0	2.5	2.1	2.2	1.7	1.7	1.7
Sub-Total	417.3	426.5	438.7	444.0	456.3	455.8	467.9
OTHER COSTS							
Personnel Buyouts	0.0	0.0	4.5	0.0	0.0	0.0	0.0
Unfunded Pensions	11.3	11.7	12.2	12.3	12.5	12.9	13.3
Sub-Total	11.3	11.7	16.7	12.3	12.5	12.9	13.3
TOTAL	428.6	438.2	455.4	456.3	468.8	468.7	481.2
SURPLUS/(DEFICIT) (£m)	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
DoE Grant-in-Aid *	1.6	-1.7	-7.8	-7.9	-8.0	-8.4	-8.8
Water Resources Account	0.1	8.8	-9.7	6.6	8.0	8.7	9.3
Flood Defence Account	11.3	-3.9	-34.8	-21.1	-12.2	0.0	0.0

There may be minor arithmetical differences in these tables due to rounding.

*Apparent GIA deficits will be funded by transfer of surpluses from the Water Resources Account, and end of year carry forward provisions.

Efficiency And Savings Programme

Included in this Plan is the £200m efficiency and savings programme we launched in our 1993/94 Corporate Plan. Delivery of this package still represents a very significant managerial challenge especially at a time leading up to major organisational change. All components of this package are fully built into the budgets presented in this plan and are assumed to continue beyond the 1996/97 year shown as the final year of the package.

It is possible that our market testing programme, which is scheduled for 5 years from 1993/94, might yield further savings

of £3m in 1997/98. However, we must not underestimate the effort that will be required in setting up the Environment Agency especially in its first year of operation. For this reason it cannot be assumed that additional savings will be won to the current timescale and these have, therefore not been built into future budgets. We would ask Government not to assume them either beyond the further reduction of £1m already announced in the 1994 PES settlement.

Good progress has been made in delivering the savings and details of this progress are given in more detail in chapter 3. Full details of the package are given in figure 98 and our future plans on delivery are given throughout this plan.

Figure 98 - Our 4-Year Efficiency and Savings Programme

£m	1993/94	1994/95	1995/96	1996/97	Total
Cost Saving Initiatives					
- Superannuation changes		(3)	(3)	(3)	(9)
- Procurement targets		(2)	(3)	(3)	(8)
- Information Systems savings		(2)	(3)	(3)	(8)
- Value For Money Initiatives		(2)	(2)	(2)	(6)
- Fisheries (non-implementation of S.142)		(1)	(2)	(3)	(6)
- Revision to previously planned Flood Defence Spend		(20)	(21)	(28)	(69)
- Management Performance Targets		(8)	(8)	(8)	(24)
- Reduced Water Resources Capital		-	(2)	(1)	(3)
TOTAL SAVINGS		(38)	(44)	(51)	(133)
Manpower Control Adjustments					
- Costs	-	-	-	-	-
- Savings	(4)	(5)	(5)	(5)	(19)
- Net Costs / (Savings)	(4)	(5)	(5)	(5)	(19)
Regional Restructuring					
- Costs	3	5	2	1	11
- Savings	(2)	(9)	(14)	(16)	(41)
- Net Costs / (Savings)	1	(4)	(12)	(15)	(30)
Market Testing Programme					
- Costs	4	6	5	2	17
- Savings	(1)	(8)	(11)	(14)	(34)
- Net Costs / (Savings)	3	(2)	(6)	(12)	(17)
TOTAL SAVINGS	-	(11)	(23)	(32)	(66)
Net additional GIA savings following 1993/94 PES		(1)	(2)	(2)	(5)
Total Savings Package		50	69	85	204

Managing Staffing Numbers And Costs

During 1994/95 we have continued our very careful management of total staffing numbers. This is planned to continue and by the end of 1995/96 we will have reduced our overall staffing establishment by 1210 posts from a planned level of 8630 in 1993/94. These reductions have not been easy and have been achieved through a number of mechanisms:

- regional reorganisations and mergers;
- creation of National Services and Centres;
- our programme of market testing;
- take up of voluntary severance.

Together these initiatives have allowed us to reduce our numbers without the need for any compulsory redundancies. It is hoped that we can continue this approach into the future as reductions are planned for 1995/96.

Whilst our planned manpower figures remain as they were in last years Corporate Plan they do not prejudice the results of

future initiatives which may, or may not, allow for further reductions. Indeed, during 1994/95 some future reductions were made possible through the creation of the National IS Service and as a result of the Market Testing programme. However, as a result of increasing demands on front line staff and the need to implement strategic IS systems in advance of the Agency some of these savings have been re-deployed.

Full details of our staffing numbers over the plan period are given in figures 100 to 102. Since total salaries and wages costs represent about one third of our total operating budget it is important they are kept under close control. Full details of this expenditure is given in figure 99.

The figures clearly demonstrate our compliance with the Government Public Sector Pay Policy and our commitment to increased efficiency. The cost of pay awards for our employees in 1995/96 will be funded from our efficiency programme, with reward being made through our Performance Related Pay mechanism.

Figure 99 - Subjective Analysis of Expenditure

£k	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
SALARIES							
Costs	98786	104097	104671	104004	106179	106047	108849
Superannuation	7649	5371	6818	5837	5895	5888	6044
NIC	7965	8768	9216	8730	8840	8829	9062
Agency, Temps and Other ⁽¹⁾	5104	3423	9163	3937	3761	3756	3855
Voluntary Severance	0	12197	1406	2724	222	222	228
WAGES							
Costs	28950	30183	27239	25691	27094	27060	27775
Superannuation	1909	1280	1577	1144	1156	1155	1186
NIC	2326	2465	2438	2178	2194	2191	2249
Agency, Temps and Other	2718	685	249	608	707	706	725
Voluntary Severance	0	1971	1556	415	0	0	0
Sub-total Staff Costs	155406	170440	164331	155268	156048	155854	159973
Travel and Subsistence	11505	11703	11588	12619	12847	12831	13170
Consultants	15968	11990	17885	19555	18477	18454	18942
Other Hired and Contracted Services	118874	124955	148938	147920	160383	160231	164523
PLC Services	23170	23003	21441	22128	19682	19658	20177
Equipment, Tools and Materials	49147	44069	41081	49191	51955	51890	53261
Utility Costs	8740	6275	6832	6263	6411	6403	6572
Other	34458	34073	31150	31043	30533	30495	31301
Sub-total Other Costs	261862	256068	278915	288719	300288	299962	307946
TOTAL OPERATING COSTS	417268	426508	443246	443987	456336	455816	467919
Unfunded Pensions	11300	11700	12200	12300	12500	12900	13300
TOTAL COSTS	428568	438208	455446	456287	468836	468716	481219

1 - Agency, Temps and Other includes compensation payments for changes in terms of employment, in particular, £4.5m for Job Evaluation in 1994/95.

Figure 100 - Total Staffing by Function

(See note 2 below about comparison between historical and future data)

FTE	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
CORE FUNCTIONS:							
Water Quality ⁽¹⁾	1531	1189	1269	1239	1241	1241	1241
Water Resources	777	741	782	775	775	775	775
Flood Defence	3135	3036	3056	3044	3048	3048	3048
Fisheries	456	489	531	515	515	515	515
Conservation	65	85	87	86	86	86	86
Navigation	80	78	85	84	84	84	84
Recreation	29	27	33	33	33	33	33
Sub-total	6072	5645	5843	5776	5782	5782	5782
SUPPORT SERVICES:							
Administration	476	410	417	417	417	417	417
Legal Services	78	81	76	78	78	78	78
Estates	36	35	33	32	32	32	32
Public Relations	43	46	48	50	50	50	50
Information Systems ⁽⁴⁾	179	173	-	-	-	-	-
R & D	16	15	17	18	16	16	16
Finance	295	295	296	289	289	289	289
Personnel	114	106	98	91	88	88	88
Other	344	229	104	102	104	104	104
Sub-total	1581	1390	1089	1077	1074	1074	1074
Uncomplemented Posts ⁽²⁾	588	323	-	-	-	-	-
NATIONAL CENTRES / SERVICES:							
Environmental Surveillance and Instrumentation	-	10	21	21	20	20	20
Environmental Policy Unit	-	1	3	3	3	3	3
Fisheries Laboratory	-	5	5	5	5	5	5
Groundwater	-	2	3	3	3	3	3
Health & Safety	-	3	3	3	3	3	3
National Information Systems	-	14	194	174	174	174	174
National Laboratory Service	-	294	319	313	311	311	311
Market Testing Unit	-	10	13	14	14	14	14
Toxic and Persistent Substances	-	6	10	10	10	10	10
Procurement	-	3	4	4	4	4	4
Rod Licence Administration	-	0	3	3	3	3	3
Training	-	3	8	9	9	9	9
IAS Project Team	-	0	4	5	5	5	5
Sub-total National Centres / Services	0	351	590	567	564	564	564
TOTAL⁽³⁾	8241	7709	7522	7420	7420	7420	7420

1 - In 1992/93 laboratories are included under Water Quality. Thereafter they are included under national centres / services.

2 - From 1994/95 onward uncomplemented posts are included in the relevant core functions / support services.

3 - Actuals do not include vacant posts. At the end of 1993/94, 185 of our 7894 FTE posts (revised budget) were unfilled.

4 - In 1992/93 and 1993/94 Information Systems staff were reported in regional staffing. After 1993/94 they are part of the National Information Systems service. More information can be found in chapter 7.

Figure 101 - Total Staffing by Grade

FTE	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
NON-MANUAL⁽¹⁾							
Senior Managers	184	211	192	189	189	189	189
Grade 7+ / Bands D,E,F	1533	1475	2481	2450	2450	2450	2450
Below Grade 7 / Bands A,B,C	3790	3432	3045	3003	3002	3002	3002
Sub-total	5507	5118	5718	5642	5641	5641	5641
MANUAL							
NJIC Adults	1972	1784	1697	1671	1672	1672	1672
NJIC Youth	1	0	0	0	0	0	0
NJCC Craft	171	131	105	107	107	107	107
NJCC Apprentices	2	2	2	0	0	0	0
Sub-total	2146	1917	1804	1778	1779	1779	1779
Uncomplemented Posts ⁽²⁾	588	323	-	-	-	-	-
National Centres / Services ⁽²⁾	0	351	-	-	-	-	-
TOTAL	8241	7709	7522	7420	7420	7420	7420

1 - In 1994/95 we changed our salary grades from 1-12 to a system with Bands A-F. In this table, the "Actuals" are based on the old grades, but from 94/95 numbers are based on the new Bands.

2 - From 1994/95 onward uncomplemented and national centre / service posts are included in the relevant salary / wage grades.

Figure 102 - Total Staffing by Contract Type

FTE	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97	Estimate 97/98	Estimate 98/99
COMPLEMENTED POSTS							
Permanent Staff	7483	6722	6762	6720	6724	6724	6724
Limited Period Staff	144	274	481	447	445	445	445
Consultants	3	5	2	2	2	2	2
Agency and Other	24	34	27	14	14	14	14
TOTAL COMPLEMENTED POSTS	7653	7034	7272	7183	7185	7185	7185
UNCOMPLEMENTED POSTS							
Limited Period Staff	413	280	218	236	234	234	234
Consultants	54	7	0	0	0	0	0
Agency and Other	122	36	32	1	1	1	1
TOTAL UNCOMPLEMENTED POSTS	588	323	250	237	235	235	235
National Centres / Services ⁽¹⁾	0	351	-	-	-	-	-
TOTAL	8241	7709	7522	7420	7420	7420	7420

1 - From 1994/95 onward national centres/services are included in the relevant contract types.

Controlling Administrative Costs

Every year a limit on Total Administrative Costs (TAC) is agreed between ourselves and the DoE. This is against a definition which has not changed since 1991. Due to low levels of inflation and our commitment to increasing efficiency we have agreed to hold this limit at £84.5m, the same as in 1993/94.

This limit is held constant in future plan years on the understanding that average inflation does not exceed 4%. In addition there may need to be a degree of flexibility to meet any compensation payments or other unforeseen transitional costs during the run-up to the Environment Agency.

The running costs of Head Office have reduced consistently over recent years. This has been possible through a refocussing of some activities to National Services as well as a reduction in the number of posts and a general drive for greater efficiency through the market testing programme.

Total Head Office costs will actually be £10m for 1995/96 and 1996/97. The figure of £11m shown in the table below includes the full cost of some National Services including Health and Safety, the Market Testing Unit, National Procurement and an element of National Training.

Figure 103 - Total Administrative Costs

£k	Actual 92/93	Actual 93/94	Budget 94/95	Budget 95/96	Planned 96/97
STAFF COSTS					
Administration	8638	8651	9461	9465	9621
Legal Services	2141	1944	1929	1690	1723
Estates	850	823	725	800	786
Public Relations	947	826	865	849	861
Information Systems	6104	5457	5589	6632	6632
Finance	5495	5593	5623	5690	5742
Personnel	3497	3286	3023	2446	2499
Sub-total Staff Costs	27672	26580	27215	27572	27864
CONTRACTED OUT					
Administration	2242	2407	2208	2690	2713
Legal Services	379	551	757	492	500
Estates	107	88	124	171	174
Public Relations	751	658	731	722	740
Information Systems	11345	10095	10873	12390	12390
Finance	1122	1118	1203	558	525
Personnel	2442	2441	2693	2084	2134
Sub-total Contracted Out	18388	17358	18589	19107	19176
OFFICE & ACCOMMODATION COSTS					
Rent and Rates	5769	6591	7171	7241	7429
Construction Costs	608	534	330	693	487
Fitting Out Costs	1325	1467	883	800	809
Cleaning and Security	1244	1305	1344	1271	1298
Repair and Maintenance	1881	1907	1727	2096	2089
Removals	14	23	46	15	16
Power	2514	1978	2485	1968	2014
Telephones, Postage etc.	3985	4305	4078	4330	4355
Stationery and Consumables	2525	2770	2298	2348	2415
Office Equipment	4930	4458	4365	4564	4115
Sub-total Office & Accommodation Costs	24795	25338	24727	25326	25027
INSURANCE	1122	972	1401	1264	1289
TOTAL REGIONAL ADMINISTRATIVE COSTS	71977	70248	71932	73269	73356
NATIONAL COSTS					
Head Office Costs	11137	11057	12350	11048	10961
Audit, Bank Fees and HO Insurance	212	173	218	183	183
TOTAL ADMINISTRATIVE COSTS	83326	81478	84500	84500	84500

Controlling Accommodation Costs

The 1992/93 Office and Property Valuation Report prepared for the NRA and supplemented by periodic in-house reviews form the basis of our detailed Estates Management Plan. Planning of future office accommodation is made increasingly difficult at the present time due to uncertainties regarding the structure and organisation of the Environment Agency.

A summary of our acquisition and disposal plan is given in figure 104 presented below. Whilst it aims to be self financing, disposals in particular tend to be heavily dependent on prevailing market conditions. The disposal plans also include sale of land belonging to individual local Flood Defence Committees which can be affected by the availability, or not, of planning permission. In the disposal figure of £4.0m for 1995/96 some £2.7m relates entirely to flood defence assets. Part of the sale proceeds of the other assets will also be attributable to Flood Defence Committees.

All proposals within the plan are subject to full appraisal and evaluation procedures and the availability of resources in compliance with overall NRA policy. This includes compliance with the Estates policy instructions, Scheme of Delegation and Financial Memorandum. Similarly, no new office accommodation is acquired without first checking the Government's Common User Estate for comparison with the private property market.

All property transactions will take account of value for money initiatives and, where appropriate, market testing proposals. All surplus property will be disposed of as soon as possible taking into account possible future use by the Agency or conversion for other uses where it is cost effective to do so. Some projects are also dependent on future levels of GIA and other funding decisions yet to be determined.

Figure 104 - Accommodation Costs

Year	Acquisition / Expenditure Plan		Property Disposal Plan	
	£'000	Nos.	£'000	Nos.
1994/95	1343	14	1539	15
1995/96	1802	17	4006	32
1996/97	1940	3	1610	11
1997/98	1537	3	267	2
TOTAL	6622	37	7422	60

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Glossary

AMP2	Asset Management Plan	NALD	National Abstraction Licence Database
BW	British Waterways Board	NAO	National Audit Office
C	Conservation	NERC	Natural Environment Research Council
CGEA	Consultative Group for the Environment Agency	NIC	National Insurance Contributions
CMP	Catchment Management Plan	NIPS	National Incidents and Prosecutions System
CP	Corporate Planning	NIS	National Information Systems
DoE	Department of the Environment	NJCC	National Joint Craft Committee
DTI	Department of Trade and Industry	NJIC	National Joint Industrial Committee
E-Mail	Electronic Mail	NJSC	National Joint Staff Committee
EAAC	Environment Agency Advisory Committee	NLO	Net Limitation Order
EC	European Community	NPAS	National Planning Applications System
EGPSG	Executive Group Priorities Sub-Group	NRA	National Rivers Authority
ERDF	European Regional Development Fund	NSA	Nitrate Sensitive Area
EWf	Emergency Workforce	NVZ	Nitrate Vulnerable Zone
F	Fisheries	NWC	National Water Classification
FD	Flood Defence	OFWAT	Office of Water Services
FDMS	Flood Defence Management System	PARCOM	Paris Commission
FRCN	Fisheries, Recreation, Conservation and Navigation	PES	Public Expenditure Survey
FTE	Full Time Equivalent	P&P	Personnel and Payroll System
FWR	Foundation for Water Research	PR	Public Relations
FY	Financial Year	PRAIRiE	Pollution Risk Assessment In River Environments
GEC	Grant Earnings Ceiling	PRP	Performance Related Pay
GIA	Grant In Aid	R	Recreation
GIS	Geographical Information System	R&D	Research and Development
GPZ	Groundwater Protection Zone	RFAC	Regional Fisheries Advisory Committee
GQA	General Quality Assessment	RHS	River Habitat Survey
HE	House Equivalent	RQO	River Quality Objective
HMIP	Her Majesty's Inspectorate of Pollution	S105	Section 105 of the 1991 Water Resources Act
HMSO	Her Majesty's Stationery Office	SI1217	Statutory Instrument number 1217
HSE	Health and Safety Executive	SLA	Service Level Agreement
IAS	Integrated Accounting System	SPACE	Simple Practical Application of Collective Experience
IBU	Internal Business Unit	SS	Support Service
IHWF	In House Workforce	SWQO	Statutory Water Quality Objective
IPC	Integrated Pollution Control	TAC	Total Administration Cost
IPPC	Integrated Pollution Prevention and Control	TCF	Totally Chlorine Free
IS	Information Systems	TOC	Total Operating Cost
ISPAB	IS Project Assessment Board	UK	United Kingdom
IT	Information Technology	UN	United Nations
K	Above inflation price increases allowed to Water Companies by OFWAT	UWWTD	Urban Wastewater Treatment Directive
LIMS	Laboratory Information Management System	VFM	Value For Money
MAF	Minimum Acceptable Flow	WAMS	Water Archive and Monitoring System
MAFF	Ministry of Agriculture, Fisheries and Food	WO	Welsh Office
MEP	Member of the European Parliament	WPZ	Water Protection Zone
MF	Multifunctional	WQ	Water Quality
MIS	Management Information System	WQO	Water Quality Objective
MTP	Medium Term Plan	WR	Water Resources
N	Navigation	WRA	Waste Regulation Authority
		WRc	Water Research Centre
		WSPlc	Water and Sewerage Public Limited Company

HEAD OFFICE

Rivers House
Waterside Drive
Aztec West
Almondsbury
Bristol
BS12 4UD
Tel: 01454 624 400
Fax: 01454 624 409

ANGLIAN

Kingfisher House
Goldhay Way
Orton Goldhay
Peterborough PE2 5ZR
Tel: 01733 371 811
Fax: 01733 231 840

NORTHUMBRIA & YORKSHIRE

Rivers House
21 Park Square South
Leeds LS1 2QG
Tel: 0113 244 0191
Fax: 0113 246 1889

NORTH WEST

Richard Fairclough House
Knutsford Road
Warrington WA4 1HG
Tel: 01925 653 999
Fax: 01925 415 961

SEVERN-TRENT

Sapphire East
550 Streetsbrook Road
Solihull B91 1QT
Tel: 0121 711 2324
Fax: 0121 711 5824

SOUTHERN

Guildbourne House
Chatsworth Road
Worthing
West Sussex BN11 1LD
Tel: 01903 820 692
Fax: 01903 821 832

SOUTH WESTERN

Manley House
Kestrel Way
Exeter EX2 7LQ
Tel: 01392 444 000
Fax: 01392 444 238

THAMES

Kings Meadow House
Kings Meadow Road
Reading RG1 8DQ
Tel: 01734 535 000
Fax: 01734 500 388

WELSH

Rivers House/Plas-yr-Afon
St Mellons Business Park
St Mellons
Cardiff CF3 0LT
Tel: 01222 770 088
Fax: 01222 798 555



The NRA is committed to the principles of stewardship and sustainability. In addition to pursuing its statutory responsibilities as Guardians of the Water Environment, the NRA will aim to establish and demonstrate wise environmental practice throughout all its functions.