

ANNUAL REPORT AND ACCOUNTS 1994/95

*“A year of
continuing commitment
and progress”*



NRA

National Rivers Authority

Guardians of
the Water Environment



ENVIRONMENT AGENCY

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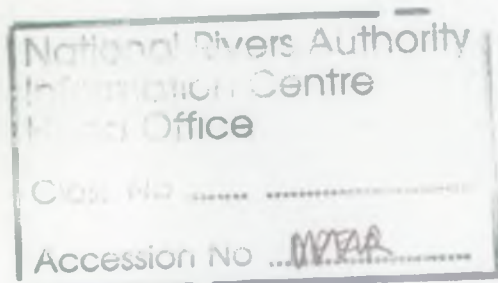
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“ We will protect and improve the water environment by the effective management of water resources and by substantial reductions in pollution. We will aim to provide effective defence for people and property against flooding from rivers and the sea. 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. ”



THE NATIONAL RIVERS AUTHORITY

The National Rivers Authority (NRA) came into being following Royal Assent of the Water Act 1989 on 6th July 1989, taking up its full statutory duties at vesting on 1st September 1989. Our role is to protect and improve the water environment in England and Wales.



Awarded for excellence

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 abstractors and other users.
- 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.
- To provide challenge and opportunity for employees and show concern for their welfare.

ENVIRONMENT AGENCY



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FURTHER INFORMATION

For further information about the NRA's Annual Report, Strategies and Plans, please contact:

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

Further copies of the Annual Report and Accounts and other NRA publications can also be obtained from the NRA Regional Offices listed on the inside back cover of this report. Copies of Catchment Management Plans can also be obtained from NRA regional or local area Offices.

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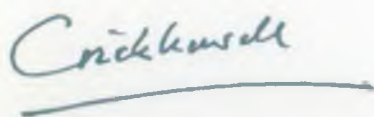
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TO THE SECRETARIES OF
STATE AND THE MINISTER
OF AGRICULTURE,
FISHERIES AND FOOD

We have the honour on behalf of the National
Rivers Authority of submitting our sixth Annual
Report and Accounts for the financial year
commencing 1 April 1994 to 31 March 1995



CHAIRMAN Lord Crickhowell



CHIEF EXECUTIVE Mr Edward Gallagher

JULY 1995

Laid before Parliament under Section 187 of the
1991 Water Resources Act



NRA

National Rivers Authority

National Rivers Authority
30-34 Albert Embankment
London SE1 7TL

CHAIRMAN'S STATEMENT

The NRA took up its responsibilities in September 1989 and will finish its work in April 1996 when the new Environment Agency begins its task. In a short life the NRA has established a formidable reputation and created a solid foundation on which the new Agency can build. Despite the very considerable additional burdens placed on the whole organisation in recent months as it prepared for change, we have never lost sight of our primary responsibility for the effective and efficient guardianship of the water environment.

Sustained improvement built on partnership

We have had a central role in the dramatic and accelerating improvement in water quality that has been achieved since 1989 which is confirmed by the most recent analysis of river quality which in 1994 shows a net overall improvement of 26 percent since the 1990 baseline was established. This has been achieved by a combination of tough regulation and by the considerable efforts which have been made to work closely with all those whom we regulate in order to achieve changes in attitude and practice. These relationships and effective public consultation have ensured that the unprecedented investment that has been made in recent years, not just by the water companies but by industry and by farmers, in order to reduce pollution, has been directed effectively. There has been a very significant change in attitude and we are now beginning to see the benefits.

Operating openly

In the days before privatisation the debate about what needed to be done to protect and improve the water environment tended to go on in private. We have made it our job to see that it now goes on in public. Our Catchment Management Planning approach invites all those with an interest in the water environment, or who are likely to be affected by our decisions, to participate in our planning at a local level and to discuss objectives, taking account of costs and benefits. At the end of the process, an action plan establishes a long-term vision for the catchment and describes in detail the actions that need to be undertaken both by the NRA and by others.

Providing direction

In 1992, following extensive consultation, we advised Government that in order to establish a sound basis for water quality management which enabled all concerned to see where we are trying to get to, water quality objectives should be made statutorily enforceable using the powers provided by the 1989 legislation.

After what has been a long wait, we were pleased to receive the go-ahead from Government, in February 1995, to pilot the operation of statutory water quality objectives in 8 selected river catchments.

I have never felt any sense of discomfort in the fact that it is Ministers, answerable to Parliament, who should have responsibility for deciding how far and how fast we go in improving the water environment and how big a burden can be placed on those who have to pay, but it is the NRA's job to say clearly and publicly what it believes should be done and to advise the Government accordingly.

We were pleased that in the last round of negotiations to set the investment programme of the water companies for the next 10 years (the so-called AMP2 round), Government listened to our views that additional investment, over and above that required to meet EC Directive and existing domestic legislation, was needed to deal with pollution problems affecting many of our rivers. Whilst the "discretionary" investment allowed for in AMP2 is less than that which is needed to fully fund our priority improvement programme, it will allow a good proportion of schemes to proceed. We have further made clear our view that any savings made in the total investment programme should be shared with water company customers and with the environment and should not be for the sole benefit of shareholders. We are pleased that in discussions held this summer the Director General of OFWAT has told us that he shares this view and like us wishes to see the NRA and its successor, the Environment Agency, involved in the process of consultation about these environmental priorities. It is not enough for the Director General to simply take account of his

customer service committees in deciding what allowance should be made for discretionary environmental investment. The consultation process cannot be effective if it is not backed by the technical and professional expertise that only the environmental regulators can provide.

Preparing for the Environment Agency

We have continued to provide advice and support to Government on the setting-up of the Agency and have developed close liaison with our future partners. The Agency will provide the opportunity for more coherent and integrated environmental management and for a more streamlined service to industry and the public than is possible under the current separate arrangements. I wish its newly appointed Chairman, Lord De Ramsey, every success. I will remain as Chairman of the NRA until vesting, planned for April 1996, and will be taking a close interest in the developing plans of the Agency and seeking to ensure that the lessons that the NRA has learned are passed on to its successor. I have little doubt that the Agency will be an effective force, particularly knowing the huge input into it that will come from the NRA and its workforce.

The success of the Agency will depend upon the way in which the partnership with Government works in practice, with the Agency being clear and forceful in the advice which it gives using its very considerable resources of scientific and practical experience and the Government departments giving the guidance and decisions required by statute promptly and openly. The task that confronts the new Agency is immense in both scale and importance and it has to be addressed by both partners with a sense of urgency.

Crickhowell



Lord Crickhowell

CHIEF EXECUTIVE'S REVIEW

Against a background of organisational change, and with further major reorganisation in the shape of the new Environment Agency looming on the horizon, the NRA has stuck steadfastly to its primary objective - that of protecting and improving the nation's water environment.

Improvement

The all-round improvements in water quality which we reported last year have continued. Results from our comprehensive monitoring programme carried out in 1994 reveal that since the baseline survey of 1990, a net total of 8,850 kilometres of river and canal water equating to 26.1% of the total length has been upgraded. Over 90% of our rivers and canals are now of good or fair quality. Bathing water quality has continued to improve with 82.5% of designated waters meeting the EC Directive standard. 96% of major sewage treatment works complied with their discharge consent conditions; and the number of major pollution incidents have continued to fall and are down to about one-third of their 1990 level.

Our Water Resources Development Strategy which we launched last year has begun to be translated into detail at a regional level and when fully implemented will go a long way to ensuring that adequate water supplies are available to meet growing demands well into the next century. We are making excellent progress in mapping out the nation's groundwater supplies so that avoiding action may be taken to protect these vital and vulnerable resources from contamination.

During the heavy rain which fell last winter, causing many rivers across much of Europe to overflow their banks, our flood defence structures and the largely unseen work of our operational and emergency workforce succeeded in protecting people and property from flooding. NRA-owned defences protect around 850,000 residential and commercial properties across the country and it is a testimony to their effectiveness that throughout the winter period a total of only 350 of these properties were affected by flooding.

Balancing interests

Our water environment is a national heritage and it is important that, in establishing future plans and targets, a full public discussion is allowed to take place involving others in decisions that affect them. Landowners, individuals, local

government, other government agencies, industry and interest groups all have a role to play in managing the water environment in partnership with the NRA. It is only by working together that we can achieve a shared vision for our water environment.

Balancing the needs of industry, agriculture, anglers, boaters and the general public with those of the environment is a complex task. The prime tool which we use for achieving this is the Catchment Management Planning process. We believe strongly in the value of these consultations, working with others to combine their skills, experience and enthusiasm with ours to produce comprehensive, long-lasting and balanced schemes to benefit the water environment and all those who use it. One-third of our total catchment work programme is now complete and we are on target for completing plans for all 163 catchments in England and Wales by the end of 1998.

Value for money and Efficiency

In our 1993/94 Corporate Plan we launched an efficiency and savings programme aimed at reducing planned expenditure by £200 million over a 4 year period. In 1994/95 we made net savings totalling £50 million and are on course for achieving the planned target. Last year's savings were made up of reductions in previously planned expenditure of £38 million; regional restructuring net savings of £4 million; net savings resulting from Market Testing of £2 million; £5 million savings on salary costs resulting from employing fewer people than planned; and £1 million savings from reduced grant-in-aid. Whilst the efficiency programme has necessitated reductions in the size of the existing workforce, by a further 372 posts, this has been achieved through voluntary severance.

Important changes were introduced in personnel policy with the introduction of job evaluation, performance appraisal and performance-related pay. These will further improve effectiveness and efficiency by focusing and aligning individual employee's objectives with Corporate priorities and by rewarding people on the basis of performance. In accordance with Government public sector pay policy, the cost of salary increases has been funded from our efficiency programme.

Customer Service

We were delighted in October 1994, to be awarded the Charter Mark, the Prime Minister's award for excellence in customer service. In judging the NRA's performance, the Citizen's Charter Unit looked closely at the NRA's standards of service, customer information, consultation systems and complaints procedure. They also reviewed cost-effectiveness and innovation in improving services without additional cost.

The winning of the Charter Mark was a tribute to the efforts of all our employees and marked the culmination of a three year drive to improve the quality of our services for the benefit of those who use them. The award, however, is not the end of the process; it represents the first step in moving onward to higher levels of quality and service.

People

The performance of any business is dependent on its people. Organisational re-structuring, the drive for efficiency, market testing and the impending transition of the NRA into the Environment Agency have presented our employees with major challenges, change and uncertainty. Through all this, their professionalism and commitment to protecting and improving the water environment and to providing a high quality service for customers has not faltered. In this summary my comments can only cover a small section of their achievements. I thank them all for their efforts and have every confidence in their ability to meet the changes and challenges which lie ahead.



Mr Edward Gallagher

REPORT OF THE BOARD AND REGIONAL COMMITTEES

THE BOARD

In 1994/95, we met on 10 occasions, to discuss a wide range of policy and operational issues. Once again, a number of site visits within England and Wales provided us with valuable insight into national and local environmental matters. We welcomed three new Members who replaced two retiring Members and two Members of the Board who have now joined the Environment Agency Advisory Committee. As a result of these changes, the regional responsibility of some Members was rearranged.

During the year, we received regular updates on progress with the Environment Agency Bill and contributed significantly towards the political debate. We were concerned that the Environment Agency Advisory Committee (EAAC) should adequately take into account the opinions of the NRA's statutory committees, by building upon the successful NRA base and promoting an integrated approach to environmental catchment management. We also received regular updates on discussions with OFWAT on the level of the Regional Water Companies' future expenditure on discretionary environmental schemes, and on negotiations involving the Asset Management Plan. We agreed that the Authority should urge the progress of as many environmental schemes as resources would permit.

The programme of testing our activities for value for money continued. The process of conducting efficiency reviews for Marine Survey Vessels, Conservation Corridor Surveys, Board and Committee Services, Hydrometry, Personnel and Administration was approved. Reviews of Project Engineering Services and Surveys and Transport and Mobile Plant (Riccall Depot) resulted in negotiated takeovers. We also approved the market testing of Internal Audit and, despite competition from some of the country's largest audit companies, we were pleased to award the contract to the NRA's in-house team. We also approved the reorganisation of the NRA's Information Systems (IS) department into a national service, which will deliver national IS priorities on a value for money basis.

In discussions with the Department of the Environment and Welsh Office, we approved eight catchments in England and Wales to trial Statutory Water Quality Objectives, to enable more effective monitoring of our water environment. We approved a 3% increase to the Charges for Discharge (CfD) for 1995/96. We also approved charge abatement for self

monitoring schemes which could substantially reduce the NRA's monitoring costs, thereby in turn reducing CfD unit charges. We endorsed measures for progressing automatic monitoring to make the best use of Water Quality resources, considered the analysis and presentation of River Quality Survey data and supported the initiation of an annual report on river quality. We approved publication of the NRA's triennial review of water quality and approved publication of valuable research and information on contaminated land and abandoned mines, notably a treatment strategy for Wheal Jane.

We were pleased to be able to hold increases to the Standard Unit Charge to abstractors for 1995/96 abstraction licences at or below the rate of inflation. We approved a Water Resources Capital Expenditure programme for 1995/96 with programmed projects entailing a total expenditure of £10.0m.

We supported a proposal for the NRA to become the principal partner to River Restoration Project Ltd, an EU LIFE demonstration project which would permit the restoration of two downgraded rivers (the River Cole near Swindon and the River Skerne, Darlington) to their natural state, aiming for combined restoration with flood defence. We supported, in principle, the concept of producing Primary Coastal Cell Strategies, aimed at improving the management of coastal defences and informing local authorities in accordance with national policy, in cooperation with other bodies. We were delighted with the professional handling of severe flooding and pollution events by NRA staff.

We considered a high level strategic review of fisheries activities and financing and agreed that there should be no cross-subsidisation of funding between coarse and trout fisheries and migratory salmonid fisheries. Following the introduction of a tiered rod licence and duty system last year, we agreed that there should be no increase in rod licences duties for 1995/6. After wide consultation we agreed that, where applicable, year round coarse fishing should be allowed on lakes ponds and reservoirs throughout the country except in the Norfolk Broads and certain SSSIs; that the statutory close season should be retained on rivers, streams and drains; and, close season arrangements for canals should remain largely unchanged. We endorsed the publication of a report on fish-eating birds and also approved a discussion paper, for issue as a public document, on the options for future net licence structure and duties.

We considered national navigation issues and plans for the introduction of an inter-regional reciprocal visitor licence. Regrettably, it was necessary to increase navigation charges in order to meet the Department of the Environment's requirement for 60% cost recovery by 1995/6. Mindful of the impact of price increases on the level of demand, increases were kept as low as possible.

In keeping with the NRA's role as environmental regulator, we reviewed the NRA's performance in relation to its Environment Policy, to ensure that the Authority's activities are conducted in an environmentally friendly manner. We also approved an Efficient Driver Training Programme for our staff, aimed at reducing fuel consumption and reducing the frequency of motor accidents involving NRA staff.

In the year in which the NRA celebrated its fifth birthday, we were extremely pleased to be awarded the Citizen's Charter Mark. We approved a Corporate Strategy for publication which would act as one of a number of building blocks in the NRA's corporate planning and reporting process.

We endorsed a continuing effort to enhance value for money and efficiency, through a very ambitious corporate plan and a demanding operating budget for 1995/6. We considered plans for rationalisation of the Scheme of Delegation and welcomed the increased development and application of environmental economics in the NRA. We supported the NRA's applications to the 2001/Millennium Fund for funding to support environmental improvements, over and above those that could be completed in the normal course of events.

The programme of investment in training and management development continued, with the approval of a Training Strategy and the setting up of a Technical and Professional Steering Group to address technical and professional training linked to the NRA's business needs.

Individual Board Members continued to contribute to various initiatives requiring particular expertise. These included the Review of Fisheries Activities, a Strategic Review of Contract Letting Procedures, Training and Development and technical and economic input to various publications. Invaluable contributions have also been made by individual members to the Board's Audit, Remuneration and Pensions

Committees. Regional Advisory Boards and Regional Committees have continued to benefit from the expertise and advice afforded by Members with regional responsibilities.

REGIONAL ADVISORY BOARDS

While the Board has overall responsibility for the Authority, each region has a Regional Advisory Board chaired by its national Board member. The chairmen of the statutory Regional Committees also serve on the RAB thus providing a vital link between the Board and the regions and their statutory regional committees. The RAB advises on region-specific issues and on the regional viewpoint on national issues. It also meets with important customer groups and others with whom the NRA shares a working interest.

Among the issues discussed were: Environment Agency; Market Testing (particularly the running of Project and Engineering Services by Halcrow's); AMP2 (the Water Services plc's capital programmes); Water Resources Strategy documents; Catchment Management Planning; Minewater discharges; the Net Limitation Order; progress on the introduction of Statutory Water Quality Objectives; future financing of the fisheries function; and, the impact of the EC Nitrate Directive.

REGIONAL COMMITTEES

Regional Rivers Advisory Committees

The RRACs met between 3 and 5 times during the year to provide advice to the Authority. They were consulted and kept informed on many of the same national issues of interest to the RABs. A number of RRACs also looked at the opportunities for promotion and joint projects in the conservation and recreation functions. There was broad welcome for the proposals to introduce catchment steering groups to co-ordinate consultation for Catchment Management Plans. Inland and rural sewerage was a frequent topic of discussion both in relation to AMP2 where it was generally considered inadequately provided for, and in the DoE Review of Rural Water Supply and Sewerage.

A number of small hydropower schemes are being promoted in Wales, and the Welsh RRAC discussed the implications for environmental impact of these. Two members also gave evidence to the Public Inquiry in support of the NRA's application for a Dee Water Protection Zone.

North West RRAC were pleased to receive two reports relating to Bassenthwaite Lake; firstly of North West Water plc's agreement to install a phosphate removal process at Keswick Sewage Treatment Works and secondly of the drawing up of a set of emergency measures to protect the lake in the event of a road tanker accident on the adjacent A6 road.

Regional Fisheries Advisory Committees

In common with the other Committees and the RABs, the RFACs agendas were dominated by reports on AMP2, fisheries funding, and preparation for the Environment Agency. The Committees regular business of reviewing current fisheries byelaws and introducing new ones continued, this time including a national byelaw review.

There were many national reviews and reports to consider and comment on during the course of the year. These included; the draft Salmon Management Strategy, the Fisheries Activities Review, and the Net Licence Review consultation document. Also under discussion were issues relating to bird predation on fisheries (especially cormorants), the coarse fish close season, the display of rod licences, and the introduction of catchment steering groups.

Initiatives on region-specific problems included an investigation into the decline of Usk brown trout by the Welsh RFAC and interim report into the decline of the Lower Trent fishery by Severn-Trent RFAC. The conclusion of the latter report was that following improvements in water quality, the character of the fishery is changing as the river reverts to a more natural state.

Regional Flood Defence Committees

The RFDCs met up to five times during the year to approve capital programmes for 1995/96, approve Medium- and Long-Term Plans, set levies on Local Authorities, review water level management plans and receive reports on flooding events and the progress on flood alleviation schemes in hand. The Committees considered their response to the Touche Ross report on the options for the Environment Agency. In common with the other statutory Committees, the preferred option was to model the Agency on river catchment boundaries rather than on political or administrative boundaries. Market Testing was also a frequent topic of discussion, in particular the takeover of Project Engineering Services, and the proposed market testing of the In-House Workforce.

Thames RFDC were pleased to receive approval from the Secretary of State for the Environment for the Maidenhead Flood Alleviation Scheme. The Committee also agreed to continue subsidising the Thames Barrier Visitor Centre on condition that a viable level of external funding could be obtained.

In Southern Region, the Committee discussed proposals for a new weather radar station in south-east England, and options for flood relief in Chichester.

Anglian RFDC considered the Broadland Flood Alleviation Strategy, a beach nourishment project for Lincshire, between Mablethorpe and Skegness, and the new Happisburgh to Winterton scheme where a series of off-shore reefs to protect the beach are being built.

The Secretary of State for Wales' Advisory Committee

The Committee, established by the Secretary of State for Wales to advise him on matters affecting the NRA in the Principality, met 3 times during the year and published its fourth annual report in May 1995.

SUMMARY OF THE YEAR

“1994/95 saw continuing improvements in our water environment and in the way it is managed by the NRA.”

WATER QUALITY

- We have seen a net upgrading in quality of 26.1% of the total length of rivers and canals across England and Wales between 1990 and 1994. The poorest classes have been reduced from 15.1% of the total to 9.3%.
- 82.5% of designated bathing waters in England and Wales complied with the EC Directive standard in the 1994 bathing season. This compares with 79.4% in the previous season and 66.2% in 1988, the year before the NRA took over responsibility for monitoring.
- Monitoring of WS plc sewage works discharges revealed 96% overall compliance in 1994. This compares with 94% in the previous year and 87% in 1989 when the NRA took over responsibility for monitoring.
- Close liaison with the WS plcs and input into the second phase of their investment programme (AMP2) will help ensure that investment is prioritised and targeted to deliver maximum benefits for the environment. We were successful in persuading Government to include £522 million in AMP2 for river improvement schemes over and above those required to meet EC or domestic statutory commitments.
- Agreement was reached with DoE and Welsh Office, and plans have been developed, for the pilot implementation of statutory Water Quality Objectives (WQOs) in 8 selected river catchments.
- The proposal to designate the River Dee as a Water Protection Zone was the subject of a Public Inquiry in March 1995. If approved by the Secretaries of State, this will be the first such Zone in England and Wales.
- The number of major pollution incidents was down by some 31% from 1993 and has more than halved since 1989, reflecting the efforts which have gone into pollution prevention.
- Major effort was targeted at pollution prevention as exemplified by the launch of a pollution prevention manual,

Pollution Prevention Pays video, an *Oil Care* campaign and *Oil Bank Line* free phone number.

- Where prevention measures failed, we took 348 prosecutions against offenders, of which 316 were upheld by the courts. These resulted in fines of almost £1 million and costs awarded of over £250,000.
- Our emergency response to pollution incidents ensured that 93% of major incidents were attended within our standard of service target time.

WATER RESOURCES

- Following the production of a national water resources development strategy, regional strategies have been launched and implemented to ensure that future demand for water will be met in an environmentally sustainable way.
- Progressive implementation of our Groundwater Protection policy has seen the total number of identified groundwater protection zones increased to 850 from 785 last year. 12 more Groundwater Vulnerability maps were produced bringing the total to 16 out of a total of 53 maps which will be published at regular intervals over the next 3 years to cover all of England and Wales.

FLOOD DEFENCE

- Following heavy winter rainfall, we provided an effective emergency response to 109 major flooding incidents. Without prompt and effective action many more people would have been affected by flooding.
- Over 2,100 flood warnings were issued to households and local communities, allowing time for possessions to be moved from risk areas and reducing the damage caused by flood waters.
- Maintenance of over 34,000km of flood defences and construction of 102km of new or improved defences will help to protect many communities from flooding.

FISHERIES

■ Following consultation with anglers, we secured MAFF approval for the introduction of a nationally consistent close season for coarse fishing in rivers and enclosed waters.

■ The introduction of licence sales through the Post Office network has proved a success providing greater accessibility and convenience for anglers whilst at the same time reducing administration and bad debt exposure for the Authority. Rod licence sales were 12% higher than in the previous year.

■ Surveys of 9,000km of fisheries; the completion of 51 new fish passes and 167 physico-chemical improvements; the stocking-out of over 7 million fish; and inspection of over 237,000 licences all went to ensuring the regulated management and improvement of fisheries.

CONSERVATION

■ Surveys of nearly 7,000km of river corridor, some using aerial interpretation, and development of a river habitat survey methodology provided essential information to manage and target our operations more effectively.

■ Out of a total of 356 conservation projects 279 (78%) were undertaken on a collaborative basis with a wide range of conservation partners, sharing expertise and costs.

■ More than 18,000 applications for consents and licences were screened for conservation implications or opportunities; 438 NRA new capital works incorporated conservation work.

NAVIGATION

■ We continued to achieve efficiency savings in the management of our navigation responsibilities whilst maintaining a high standard of service for customers. In response to a Government consultation paper reviewing responsibilities for navigation, we underlined the cost effectiveness and efficiency benefits which result from

managing navigation as an integral part of our other river management responsibilities. It is our belief that some inland navigations presently managed by British Waterways might be more effectively managed by the NRA.

■ A 14-day visitor licence allowing licenced users on one NRA navigation to utilise all other NRA navigations for free was piloted.

RECREATION

■ Out of a total of 194 recreation projects 123 (63%) were undertaken on a collaborative basis with a wide range of partners, sharing expertise and costs.

■ 50 NRA new capital works incorporated recreation work.

R&D

■ 100 projects or phases of work were completed and 60 new projects started.

■ Partnerships and collaborative funding initiatives with other research-commissioning organisations are estimated to have reduced the direct cost of the NRA's R&D programme by about £1 million.

■ Liaison with our future Environment Agency partners resulted in harmonisation of our respective R&D programmes.

CORPORATE

■ In October 1994 we were awarded the Citizen's Charter Mark in recognition of our commitment to providing a high quality service to our customers.

■ Progress in our savings and efficiency programme continued to ensure we are providing a value for money service. We reduced planned expenditure in 1994/95 by £50 million and are on course to achieve the target set in our 1993/94 Corporate Plan to deliver a total cost/savings package of £200 million over 4 years.

FINANCIAL SUMMARY 1994-95

Financial framework

Under the terms of our financial memorandum, we are required to:

- break-even on income and expenditure from one year to the next, subject to specific carry-forward provisions;
- spend income on the particular function for which it was raised;
- establish fair charging schemes which maximise income from those who benefit from our services or otherwise cause our costs to be incurred.

Income

The NRA derives its income from 3 main sources:

- income raised from our own charging schemes;
- levies raised on local authorities to fund flood defence activities;
- Government grants (principally, DoE grant-in-aid and MAFF grants for flood defence capital schemes).

Since our creation in 1989, we have implemented new national schemes of charging for abstraction licences and discharge consents and have revised other charging schemes to better target those who benefit from, or give rise to, expenditure by the NRA. As a consequence, the burden on the general tax-payer, in the form of Government grants, has reduced. 26% of our total income in 1994/95 was funded from grant subsidy.

In raising income from charging schemes, we set limits on charge levels so as to recover only sufficient income to offset the costs which we reasonably incur in providing the service.

Expenditure

Since its establishment in 1989, the NRA has spent £2.5 billion delivering its services.

Total annual expenditure increased by 33% between 1989 and 1991 (from £335m to £445m). Since 1991, expenditure has largely levelled out (£460m in 1994/95).

All functions have seen increases in expenditure since 1989. Expenditure on pollution control, in particular, has increased by 67% (unadjusted) since 1989 reflecting increasing emphasis on water quality matters. In absolute terms, expenditure on flood defence, with its high value

capital programme, has consistently accounted for over half of total annual expenditure (52% in 1994/95).

In addition to the money which the NRA spends directly on managing the water environment, we play an important regulatory role in influencing the environmental investment programme of industry generally and the privatised water companies in particular. Our aim is to ensure that expenditure is effectively targeted and results in maximum benefits for the water environment.

Value for money

During 1994/95, the Authority has continued its drive to maximise value for money in its use of resources and to ensure effective financial control.

Our 1993/94 Corporate Plan set out an ambitious efficiency and savings package, to reduce planned expenditure by £200 million over a four year period. In 1994/95 we achieved net savings totalling £50 million.

We have endeavoured to deliver this savings package without significant impact on our operational performance. We have initiated a phased programme of market testing of our services which, together with structural re-organisation and rationalisation, have and will continue to yield long-term cost savings. Major reviews of fisheries and navigation functions have been carried out involving critical appraisals of levels of service, costs and future finance strategies.

The implementation of formal project management monitoring and control procedures, the adoption of economic appraisal techniques and the strengthening of an on-going procurement programme will further improve financial control ensuring propriety, regularity and the delivery of value for money, with consequential benefits both for those who pay our charges and the general tax-payer.

RECEIPTS: WHERE THE MONEY CAME FROM

	Operational Receipts*	Grants and contributions	Total	% of Total Receipts
	£m	£m	£m	
Water Quality	46.5	34.1	80.6	20.0
Water Resources	66.6	—	66.6	16.5
Flood Defence	165.0	37.3	202.3	50.3
Fisheries	13.8	10.0	23.8	5.9
Recreation & Conservation	0.6	7.3	7.9	2.0
Navigation	3.3	3.0	6.3	1.6
Sub-Total	295.8	91.7	387.5	96.3
Unfunded Pensions	—	12.0	12.0	3.0
Job Evaluation**	—	2.9	2.9	0.7
Total	295.8	106.6	402.4	100.0

*Operational receipts represent cash generated from function activities and raised through charging schemes, licence fees, precepts, levies and interest receivable.

**In 1994/95 a Job Evaluation scheme involving revised salary and grading arrangements with a performance-related pay component was introduced. Payments totalling £2.9 million were made to employees to compensate them for these revised arrangements and associated changes to conditions of service.

GOVERNMENT GRANTS AND CONTRIBUTIONS BY SOURCE

	£m
DoE grant-in-aid	69.3
MAFF Grant	34.9
Welsh Office	0.4
Other	2.0
Total	106.6

Note: MAFF, Welsh Office and 'other' grants and contributions apply exclusively to Flood Defence activities (£37.3m in total).

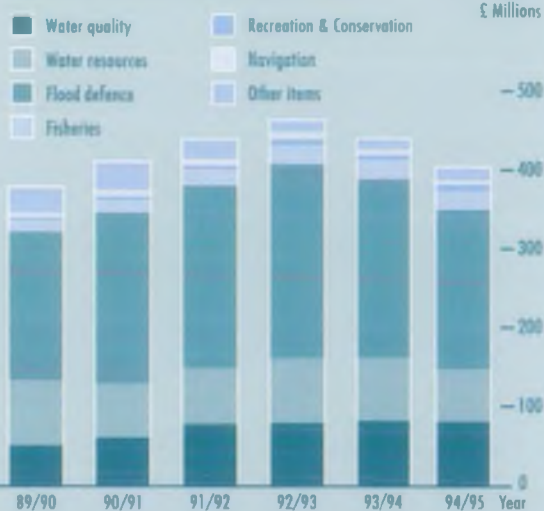
PAYMENTS: WHERE THE MONEY WAS SPENT

	£m	Net cash surplus/(deficit) — £m
Water Quality	81.4	(0.8)
Water Resources	85.6	(19.0)
Flood Defence	240.7	(38.4)
Fisheries	23.6	0.2
Recreation & Conservation	7.9	—
Navigation	6.3	—
Sub-Total	445.5	(58.0)
Unfunded Pensions	12.0	—
Job Evaluation	2.9	—
Total	460.4	(58.0)

The net cash deficit (£58 m) in 1994/95 was funded from the cash surplus carried over from previous years.

ANALYSIS OF TOTAL RECEIPTS 1989/90 – 94/95

Annual receipts
£ Millions



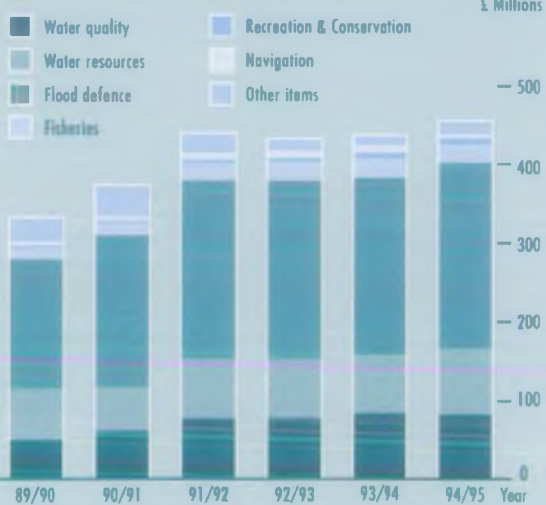
GOVERNMENT GRANT AS A PERCENTAGE OF TOTAL INCOME

Percent

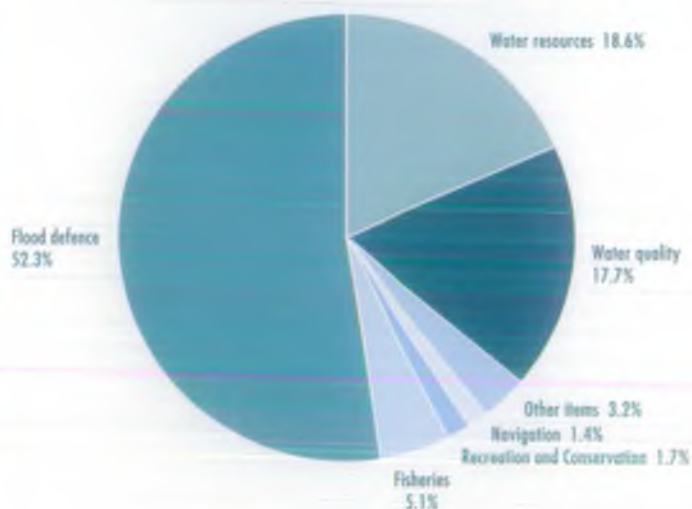


ANALYSIS OF TOTAL PAYMENTS 1989/90 – 94/95

Annual payments
£ Millions



ANALYSIS OF PAYMENTS FOR THE YEAR ENDED 31/3/95





Awarded for excellence

“ *The Citizen's Charter, launched by Government in 1991, encapsulates the principles of good public service, quality and care for the customer. We have taken these principles to heart and have continued to improve our customer focus and service in 1994/95.* ”

COMMITMENT TO CUSTOMERS

Commitment to our customers has continued to be of upmost importance throughout the year for all aspects of our work. We have implemented a range of initiatives to ensure that our staff are aware of their obligations and that our customers know what they can expect of us.

The NRA Customer Charter, published last year, was reprinted following a large uptake throughout the country with some revisions to include updated telephone and contact information. Feedback has been positive and a number of other organisations have used our Charter as a model for their own work. *The NRA Customer Charter* sets out our service aims and philosophy of dealing with other organisations and the general public. It combines our standards of service for the “Citizen's Charter”, “Code of Practice for Enforcement Agencies” and the “Open Government” initiative.

We are proud to have been awarded the Charter Mark in October 1994 for excellence in achieving these customer service aims. In judging our application, the Prime Minister's panel looked closely at the NRA's standards of service, customer information, consultation systems and complaints procedure. They also reviewed the NRA's cost-effectiveness and innovation in improving services without additional cost.

An Action Plan has been approved to ensure that we continue to improve on the services that we offer to our customers. Further developments, include the trial of a Minicom text telephone for deaf and hard of hearing people. The project, carried out in the Northumbria & Yorkshire Region, will allow the deaf community to contact a trained member of staff within the NRA to discuss any problem or to report an incident.

Complaints provide an important feedback from our customers on the quality of our services. During the year we have published a simple leaflet identifying named contact

points in each Area and Regional office for anyone to contact. The leaflet includes a pre-paid form on which complaints can be posted to a local office. We also welcome commendations which are now displayed on compliment boards at some offices.

Consultation with all water users through local Catchment Management Plans is an important part of our customer interface. Consultation Plans have been launched during the year for 41 catchments to allow any member of the public, a local organisation or business to provide comments or ask questions on a wide range of issues within each catchment area. Summaries of the feedback received are also published before the Final Action Plan is produced.

Our consultation schemes and complaint procedures have been implemented as part of our commitment to the “Working with Business” and “Open Government” initiatives.

We have also established mechanisms for anyone to ask for information as part of work for the “Open Government” initiative and EU Access to Environmental Information Regulations. After a review of our information and charging policies a new leaflet, *A Guide to Information Available to the Public*, has been published. The majority of requests for information are provided free of charge.

The table opposite details our performance against our Customer Service Targets for the year. We will continue to monitor progress and to take advantage of opportunities to improve the quality of the service we provide.

The Charter Mark is not the end of the process; it represents a milestone in our move towards achieving even higher levels of quality and service.

THE SERVICE WE PROVIDE	THE STANDARD WE AIM TO MEET	1994/95 OUTTURN (last year's results in brackets)
Responding to complaints.	An immediate response where possible. A written response with 5 working days of receipt of complaint.	For written responses - 78% (70%) answered with 5 days; 93% (92%) within 10 days.
Responding to general enquiries by telephone & letter.	An immediate response by telephone where possible. A written response within 10 working days of receipt of letter.	Not monitored centrally. Local compliance is responsibility of line management.
Answering telephone calls.	An answer within 15 seconds.	*Average 5.7 secs (6.5 secs).
Responding to application for discharge consent.	A decision within 4 months of receipt of completed application. For complex discharges, which may take longer to determine, we will agree a longer response period at the time of application.	94% (90%) answered in time.
Responding to application for an abstraction or impoundment licence.	A decision within 3 months of receipt of completed application. For complex applications, which may take longer to determine, we will agree a longer response period at time of application.	73% (74%) answered in time.
Responding to application for a consent to carry out flood defence or land drainage works on ordinary watercourses and in the floodplain.	A decision with 2 months of receipt of completed application.	99% (98%) answered in time.
Providing advice to local authority planning offices as a consultee on planning applications.	Advice provided on 50% of applications within 14 working days of receipt; 75% of applications within 21 working days; and, 95% within 28 days.	70% (66%) within 14 days; 84% (79%) within 21 days; 92% (89%) within 28 days.
Making the results of water sample analyses available on the public register.	Results on register within 60 days.	96% (96%) in time.
Responding to pollution emergencies.	Attendance within 2 hours during normal working hours and within 4 hours at other times.	93% (92%) of Category 1 and 91% (86%) of Category 2 incidents attended in target time.
Responding to reported fish kills.	Attending 90% within 2 hours during normal working hours and within 4 hours at other times.	85% (78%) of all reported incidents attended. 98% (92%) of these attended in time.
Responding to navigation incidents.	Attending 90% within 4 hours of notification.	100% (100%) in time.
Responding to request for advice on FRCN matters.	A considered response or site visit within 20 days of receiving request.	94% (94%) in time.

* For calls received at main switchboards

THE INTEGRATED APPROACH TO WATER MANAGEMENT

NRA vision and philosophy

Complex interactions in our environment require a holistic approach, treating the environment as an integrated whole, to ensure the balance of natural systems is not upset. The NRA vision is of a healthy and diverse water environment, managed in an environmentally sustainable way, balancing the needs of all users.

During the year we have continued to develop our integrated approach to managing the water environment, together with the management systems and structures to support it.

Catchment Management Planning

Many demands are placed on the water environment. Water is abstracted to meet the needs of people, agriculture and industry; treated sewage and other effluents are discharged to our rivers; changes in the use of urban and rural land can influence the natural environment; rivers, canals and the coast are used for recreation and amenity purposes. These varied uses and influences interact in many ways and the complexity of these interactions requires an integrated, cross-functional approach to balance them. The NRA's principal means of achieving this is Catchment Management Planning.

This treats a river, together with the land, tributaries and underground water connected with it, as a whole unit or catchment. It recognises that rivers are delicately balanced natural systems and that a decision taken on, say, flood defence, cannot be made in isolation of its impact on fisheries or conservation; likewise, water quality is often integrally linked with water quantity.

The Catchment Management Plan sets out a common vision for a river catchment, reached through consultation with a wide range of interest groups. It identifies objectives for catchment water quality, water quantity and physical features, and actions for the NRA and others to achieve them. Annual reviews enable the progress in improving the water environment to be reported upon.

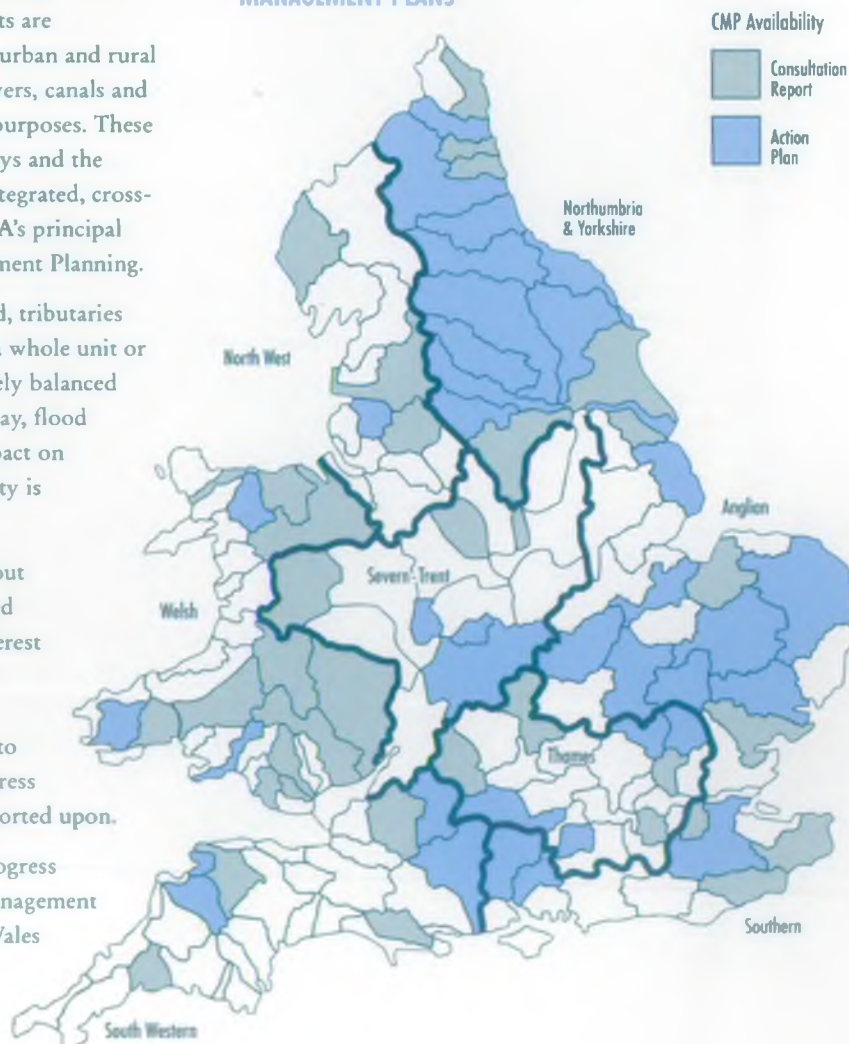
During the year we made significant progress towards our target of preparing catchment management plans for all 163 catchments in England and Wales by the end of 1998. One-third of the total

work programme is now complete and we are well on the way to meeting the objective expressed in Agenda 21 of the Earth Summit in Rio de Janeiro in June 1992, that ".....by the year 2000, all states should have national action programmes for water management, based on catchments or sub-basins....".

Benefits

Catchment Management Planning is the principle planning process whereby all water-related needs are harmonised to maximise the benefits to users, regulators, conservationists and the water environment itself.

NATIONAL RIVERS AUTHORITY CATCHMENT MANAGEMENT PLANS



For the NRA the plans:

- translate NRA functional policy into integrated catchment policy
- prioritise needs for the water environment
- sponsor integrated action and sustainable development
- facilitate understanding and ownership of multi-functional working
- establish a means for fair and equitable consideration of all water users.

For those outside the NRA the plans:

- ensure the early involvement and participation of community interests
- create partnerships with others to achieve effective action
- guide and influence the policy and action of external organisations including local authorities
- openly identify and tackle conflicts between competing water uses
- gauge public acceptance and support for catchment policies and action.

For the water environment the plans:

- concisely present relevant information about a catchment
- link land and water management issues
- support problem prevention and the treatment of causes rather than symptoms
- set a consensus based long-term strategy to guide all actions
- ensure the right action is undertaken in the right place in the right way.

Partnership and Liaison

During the year we listened to the views of many hundreds of individuals, interest groups, local communities and their representatives, industry, landowners and government agencies during the preparation of catchment

management plans. The discussions have covered matters as diverse as our approach to sustainable development and the clearance of rubbish from local rivers.

We have also listened to comments about how we produce the plans. These have enabled us to improve our approach:

- we have liaised closely with English Nature, the Countryside Council for Wales and local authorities to ensure work on Estuary Management Plans and Catchment Management Plans is effectively coordinated
- our South Western Region staff have piloted the use of 'plain English' guidelines for writing documents
- we have agreed national liaison and consultation arrangements on plans with the Ministry of Defence, English Nature, Countryside Council for Wales, Confederation of British Industry, National Trust, Forestry Commission, Ministry of Agriculture, Fisheries and Food and the Welsh Office
- our Anglian Region have established 'Catchment Panels' which give greater opportunities for local interests to inform and monitor catchment management plans and action.

In continuing to listen to those who wish to work with us on protecting and enhancing the water environment we aim to continue to develop partnerships which deliver real improvements at the local level.

Planning Liaison

Effective and proactive planning is essential to prevent environmental damage and to provide balanced and sustainable solutions to environmental problems. NRA input to Structure and Local Development Plans prepared by Local Authorities is a vital means of protection. Publication and promotion of our Guidance Notes for Local Authorities on *Ways to Protect the Water Environment Through Development Plans* in December 1993 was a significant step forward in improving our influence. In 1994/95, we dealt with over 91,000 individual planning applications in our role as a statutory consultee in the planning process.

Strong influence

Much of what we do relies on close liaison and partnership with other organisations and individuals. During the year we have completed around 400 collaborative schemes to enhance the conservation and recreation potential of our water environment. Working to shared objectives also requires the flexibility to modify our own approach where necessary. We have continued to demonstrate our commitment to openness in our policy-making process through consultation with our Regional Committees and other users.

We also seek to influence by providing advice and education on pollution prevention. 1994/95 has seen continued NRA input to the preparation of WS plc investment plans and expenditure by industry and agriculture. Our school education packs, designed to fit in with the National Curriculum and made available free of charge to schools in England and Wales, will help the next generation appreciate and care for our water environment.

Our expertise puts us in a strong position to influence others. During the year we have continued to build up effective links with the European Commission that have allowed us to input to draft policy programmes and provide advice on a wide variety of issues in support of the UK Government.

“ The NRA is responsible for water quality in all controlled waters in England and Wales. These comprise surface freshwaters, ground waters, estuaries and coastal waters to the 3 mile limit. Our aims are to achieve a continuing overall improvement in the quality of these waters through the control of pollution; and to ensure that dischargers and polluters pay the costs of the consequences of their discharges. ”

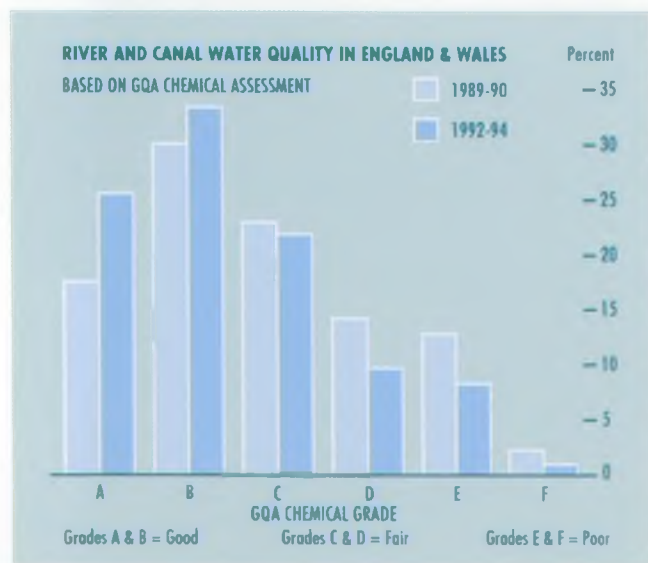
WATER
QUALITY

THE CURRENT STATE OF WATER QUALITY

In 1994, the NRA introduced the General Quality Assessment Scheme (GQA) to assess the quality of river and canal water on a comprehensive and consistent basis across England and Wales.

The GQA will ultimately consist of a number of components and the first of these, the chemical component, was implemented in 1994. Since January 1995 monitoring for the biological component has commenced and a protocol for aesthetic assessment is nearing completion.

Between 1990 and 1994 the proportion of rivers in the best chemical water quality classes increased from 47.7% to 58.8%. The length of the poorest classes reduced from 15.1% to 9.3% of the total.



Between 1990 and 1994 there has been a net upgrading in overall water quality of 26.1% of the total length of rivers and canals surveyed. The improvements have largely been achieved by continuing pollution control measures, improved performance of sewage treatment works and better control of farm wastes. The most notable improvements in water quality were achieved in the NRA's Thames, Anglian, Welsh and South Western regions. Further details of water quality within individual regions are contained in the Appendix on page 120 of this report.

FUTURE WATER QUALITY OBJECTIVES

To achieve improvements in water quality it is necessary to influence behaviour across all uses of a river catchment but, frequently, the key need is to influence the discharges from sewage treatment works and from combined sewer overflows. To compensate for years of under-investment, and to comply with European Commission Environmental Directives, the water and sewerage undertakers (WS plcs) have embarked on a major investment programme to upgrade their sewage treatment works and sewerage networks. The NRA's aim has been to ensure that investment by the WS plcs, as provided for in each of the five yearly planned investment programmes set out under the current price control regime (known as AMP2), results in maximum benefits to the water environment.

Improvements in water quality required by certain EC Directives, in particular for Urban Waste Water Treatment (UWWT) and Bathing Waters, have statutory endorsement and feature prominently in the WS plcs' investment programmes. It is expected that there will be considerable improvements in the quality of marine and coastal waters as a result of the UWWT Directive and the completion of the Bathing Waters programme. The UWWT Directive will bring further improvements to freshwaters particularly in the poor quality industrial rivers and in those where combined sewer overflows can be improved.

There are, however, other investments in sewage treatment and sewerage, that are not covered by statute, but are needed to achieve long-standing river quality objectives (RQOs) involving the elimination of pollution blackspots and the upgrading of other watercourses. In the AMP2 negotiations, the NRA was successful in persuading Government of the need for additional investment, over and above that required to meet EC Directive or domestic legislation (so-called "discretionary" investment), in order to fund this clean-up programme. £522 million was set aside for this purpose. Whilst this is less than the £918 million which the NRA has estimated is required to fully fund the discretionary improvement programme, it will enable a good proportion of prioritised schemes to go ahead. Meanwhile, the NRA has made clear its view that any economies made in the total investment programme of the WS plcs should be shared with water company customers and the environment and should not be for the singular benefit of water company shareholders. In this way, the balance of improvement

PRIORITY IMPROVEMENT SCHEMES

Some 168 schemes were on the NRA's original £918 million improvement programme. 51 should be affordable within the confines of the agreed budget. The following examples describe some of the priority schemes:

Mersey Basin

Three sewage treatment works - at Davyhulme, Warrington and Widnes - are included in the improvement plan. Proposed improvements aim to reduce the amount of organic material entering the waterway which suffers from a chronic shortage of dissolved oxygen. 20 kilometres of water will be improved, with the upgraded Davyhulme works also bringing quality improvements to 17.9 kilometres of the Manchester Ship Canal.

Aire and Calder

91.8 kilometres of these two Yorkshire rivers are currently downgraded by discharges from Huddersfield sewage treatment works. Also contributing to the poor water quality is the Mitchell Laithes works in Wakefield. Improvements to the two works will enable restoration of fair river quality. Three sewage works on the Aire - Esholt (Bradford), Knostrop (Leeds) and Marley (Keighley) are also targeted for investment to improve 84.4 kilometres currently of poor quality.

The Norfolk Broads

An ongoing problem in the Norfolk Broads is eutrophication, the over-supply of nutrients to the aquatic environment that encourages the growth of algae to the detriment of other aquatic life. Phosphorus from sewage effluent has been implicated as a major causal factor.

Phosphorus stripping has been carried out for several years on the basis of informal arrangements between the NRA, Anglian Water and the Broads Authority at 7 sewage treatment works which discharge to the rivers Ant and Bure. The newly agreed funding will help to formalise the arrangements and removal will start at two additional works - Ludham which discharges to the River Thurne and South Walsham which discharges to the River Bure. The aim is to reduce the level of phosphorus in discharged effluent to one milligram per litre. This will significantly help improve water quality in the Broads network and will make further restoration activities - such as pumping of silt and mud to remove old nutrients - much more effective.

Worcestershire Stour

The clean-up concentrates on four major sewage treatment works - Roundhill, Freehold, Caledonia and Kidderminster. Some upgrading of sewerage in the upper catchment, where storm overflows have caused problems, may also be necessary. Conventional treatment is adequate to maintain the river as class 3 but further investment is needed to raise it to class 2, promoting the river's coarse fishery and protecting the River Severn, into which the Stour flows, as a drinking water source.

schemes, for which there remains considerable public support and expectation, might also be progressed within the next five years.

PUTTING WATER QUALITY OBJECTIVES ON A STATUTORY FOOTING

Statutory Water Quality Objectives (WQOs) are seen as a key means to improve water quality. In the public consultations that preceded the 1989 Water Act and the establishment of the NRA, the Government declared its intention "to develop the existing system of RQOs into an enforceable, statutory system providing a firm policy framework for the protection of all controlled waters". Under this system the targets set for water quality would for the first time be statutory and the NRA would be under a duty, once they were set, to use its pollution control powers to ensure that the objectives were achieved.

In 1991, the NRA consulted widely on its proposals for introducing statutory WQOs. In 1992, Government took forward the NRA's proposals for a statutory WQO scheme in rivers through its own consultation exercise, along the lines that statutory WQOs should be set for individual stretches of water according to the intended uses of those waters.

The Surface Waters (Rivers Ecosystem) (Classification) Regulations 1994, which came into force in May 1994, prescribed a system of classification of the overall quality of rivers known as the River Ecosystem Classification. This classifies river water into 5 quality classes based on chemical properties which determine a river's ability to sustain a diversity of aquatic life. Once statutory WQOs are set, by reference to this classification, the NRA will take decisions on discharge consents and other water quality management activities in a manner designed to achieve the specified quality objective by the set date. Statutory WQOs will specify for individual stretches of river, the water quality standards it is intended should be achieved (in terms of the relevant Classification Regulations); the EC Directives which apply; and the date by which these requirements are to be met. This sets the timetable for any water quality improvements which may be required.

During the year the NRA received approval from Government to proceed with a pilot programme of statutory WQOs in 8 selected catchments. Consultation documents are being prepared for informal consultation on the 8 catchments, prior to formal consultation by the Secretary of State.

USING THE CATCHMENT MANAGEMENT PROCESS

Depending on the outcome of the pilot scheme, it is envisaged that statutory WQOs could be introduced across the country using the NRA's Catchment Management Planning approach. This takes into account a wide range of views as to the appropriate uses and resultant water quality standards that should apply to stretches of river within a catchment. It is important that, in establishing future plans and targets, a full public discussion is allowed to take place on the appropriate level of water quality to protect different uses, taking into account both the costs and the benefits of bringing about any necessary improvements. The Catchment Management Planning process is an ideal vehicle for this debate to take place.

DISCHARGE CONSENTS AND COMPLIANCE MONITORING

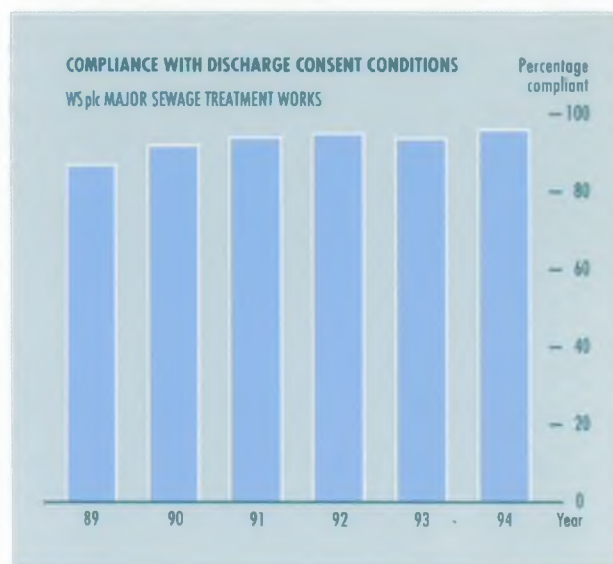
The principal means by which the NRA regulates water quality is through the issue of consents to discharge. Under the Water Resources Act 1991, it is an offence, under most circumstances, to discharge sewage or trade effluent to a controlled water without the prior consent of the NRA. Around 4,000 new consents were determined by the NRA in 1994/95 and some 3,500 existing consents were reviewed.

Quality objectives relating to the environmental requirements and end-uses of a receiving water are central to the NRA's discharge control policy. Having identified the necessary quality of the receiving water to meet both its environmental needs and those of end-users, the appropriate consent conditions to achieve quality objectives can then be determined.

The NRA currently manages over 100,000 consented discharges for a variety of effluents ranging from major industrial wastes to small septic tank discharges.

In the calendar year 1994, 12,975 significant discharges had numeric consent conditions attached to them (generally these are the discharges with the greatest potential for causing pollution). The NRA sampled 10,040 of these and 76% were found to be compliant with their consent conditions.

The compliance of WS plc sewage treatment works (STWs) is generally good and has continued to improve over the last few years. Of the numeric consents referred to in the preceding paragraph, 4,325 were attached to WS plc sewage treatment discharges. 4,054 were sampled by the NRA and 96% were confirmed compliant. It must, however, be noted



that many of the consents that were inherited by the NRA were not determined on a "river needs" basis and, for the present, many existing consents still have only to comply with conditions on a 95 percentile basis and are not currently subject to upper tier limits.

SENSITIVE AREAS AND HIGH NATURAL DISPERSION AREAS

During 1993/94 the NRA provided advice to the Government on the identification of Sensitive Areas and High Natural Dispersion Areas (HNDAs) under the UWWTD. In May 1994, the Government announced the identification of 58 HNDAs and 33 Sensitive Areas (Eutrophic) in England and Wales. HNDAs are saline waters where the discharge of primary as opposed to the norm of secondary treated effluent may be allowed, subject to the outcome of comprehensive studies to ensure no adverse environmental effect. These studies will be undertaken over the next few years, at the Water Service Companies' expense, for the 91 discharges associated with the 58 HNDAs. The NRA will oversee these procedures and certify whether it is satisfied with the outcome of the studies.

The Sensitive Areas (Eutrophic) are waters receiving large sewage discharges and affected by eutrophication. Some 41 STWs discharging to the identified waters (all freshwaters) will require phosphorus removal treatment by the end of 1998. Identification of waters must be reviewed at least every 4 years, the first review being planned for 1997. The NRA has put in place a monitoring strategy to assess, for some 200

additional waters, whether a case for designation at the 1997 review is appropriate. The monitoring will also assist in determining whether nutrient removal should be required for large STW discharges into these waters.

ENVIRONMENTAL MONITORING

The NRA is responsible for some 20 EC Directives which have a direct environmental monitoring requirement.

The EC Bathing Waters Directive has a particularly high public profile and the NRA continues to maintain rigorous sampling and analytical procedures for the 419 identified bathing waters in England and Wales.

During 1994, overall compliance with the prescribed coliform standards increased to 82.5% from 79.4% in the previous year. In 1988, the year before the NRA assumed responsibility for monitoring, the compliance rate was 66.2%. Improvements in water quality have been achieved over the last 6 years and the number of bathing waters failing in consecutive years has again decreased. A further increase in compliance is expected after 1995 once the majority of capital improvement schemes currently being undertaken by the WS plc's are completed.

Following publication by the European Commission of revised proposals for the EC Bathing Water Directive in 1994 the NRA has been involved in discussion and consultation on their likely impact. The NRA was called to present evidence to the House of Lords Environment Committee who were examining the bathing water proposals and have also acted as technical expert to the Economic and Social Committee of the

European Communities. The NRA continue to advise DoE and European institutes on the likely impacts of this and other Directives. At present the European Parliament's Environment Committee have recommended that further deliberations are to be held in abeyance until further justification of the parameters and testing methods have been provided by the Commission.

As well as monitoring waters against pre-determined standards, the NRA undertakes large-scale surveillance operations. During 1994 three coastal water surveys were carried out using aircraft in joint deployment with the NRA's marine survey vessels, to assess the quality of coastal waters. Using thermal and spectrographic imaging technology, data were produced for a wide range of determinands, including metals, nutrients and suspended solids. Coastal surveillance and local operational monitoring are currently under review by the NRA.

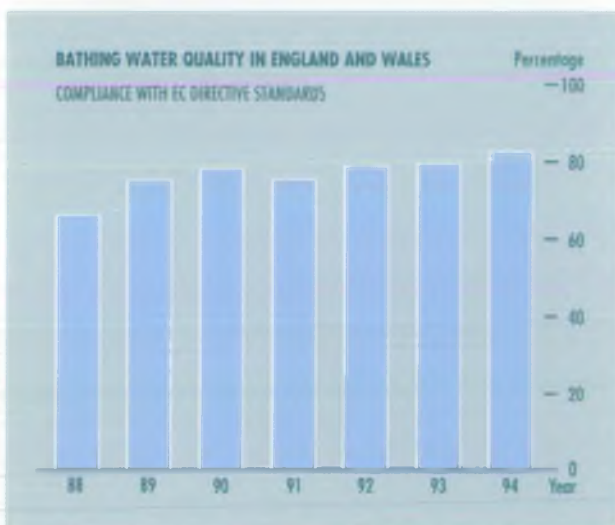
POLLUTION PREVENTION

Pollution prevention is of vital importance to achieving and sustaining improvements to the water environment.

Using the principle that prevention is always better than cure, the NRA continues to strive to change the attitudes and practices that contribute to pollution by raising peoples' awareness of their interaction with, and responsibilities for, the water environment.

These activities have encompassed selective campaigns, education programmes, the production of a pollution prevention manual and best practice guidance notes as well as site visits. Point sources, diffuse pollution and the correct storage of potentially polluting substances have all been targeted.

238 pollution prevention campaigns were carried out in 1994/95 ranging from small-scale initiatives targeted at local problems to larger national projects. In the latter category, a video campaign entitled *Pollution Prevention Pays*, aimed at helping small and medium sized industrial companies to identify potential pollution sources on their sites, stimulated widespread interest with numerous requests for the video and for guidance from the NRA.



The NRA's freefone number – 0800 80 70 60 – which enables members of the public to alert the NRA when an environmental incident occurs, has been a great success. Since its introduction in 1993 some 49,000 calls have been dealt with.

Oil pollution is of particular concern to the NRA as the number of incidents across all regions has been on an upward trend in recent years. In 1994, oil was the most commonly identified pollutant accounting for 27% of all substantiated pollution incidents. Oil was also involved in over 17% of the most environmentally damaging, Category 1, incidents. In January 1995, the NRA initiated a comprehensive *Oil Care Campaign* aimed at users, suppliers and distributors of oil. An *Oil Bank Line* number - 0800 663366 - was set up to advise people of the location of their nearest oil-recycling facilities and literature on the safe use of oil products was distributed widely, especially to retail outlets. The interest generated by this campaign has been enormous and we will be closely monitoring its impact.

In last year's Annual Report we reported on the success of a waste minimisation project to which the NRA had contributed in the Aire and Calder catchment, in Yorkshire. Subsequently, the NRA has been involved in a number of similar projects in other locations in England and Wales. These projects have demonstrated that applying often low cost and easy to implement waste minimisation techniques can produce considerable cost savings both for industry and for the environment in terms of reduced resource inputs and effluent disposal. We intend to publish the results of these studies and identify best practices that can be widely adopted with mutual benefits for the environment and for industry.

In February 1994 the NRA applied to the Secretary of State for an order designating the River Dee as a Water Protection Zone. The Dee is one of the biggest lowland rivers used for public water supply and is especially vulnerable to pollution incidents arising from the accidental spillage of chemicals by industry. The protection zone order is a legal mechanism aimed at preventing water pollution arising from activities which are unsuited to control by consenting of direct discharges. On 1 March 1995, a public inquiry was opened and held over a two week period. A final decision is awaited from the Secretaries of State for Wales and the Environment.

ABANDONED MINES AND CONTAMINATED LAND

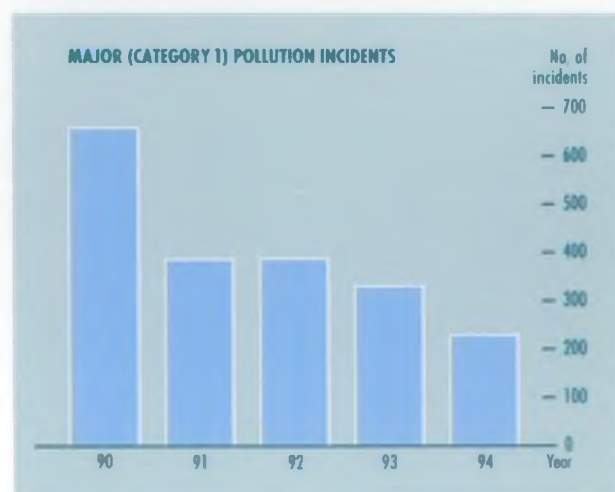
Abandoned mines and contaminated land pose a significant threat to the water environment in certain parts of the country. The NRA has put considerable effort into calling for legislative action to deal with these problems and we welcomed Government recognition of our concerns in the

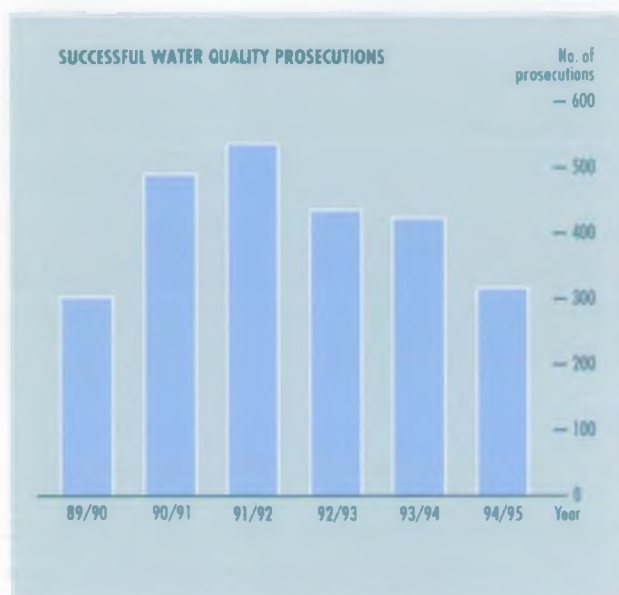
form of the inclusion of new sections covering these items in the draft Environment Bill. With regard to abandoned mines, the NRA has been active in ensuring that the Environment Bill will bring these under the direct pollution control powers of the Agency. Although the Bill proposes a compromise solution, mines abandoned after the end of 1999 will no longer be exempt from legislation. Also, six months notice of abandonment will be required so that a proper abandonment programme can be developed and implemented. For the first time the pollution problems associated with contaminated land are specifically mentioned in the Bill and the NRA has spent much time and effort commenting on various aspects of how the legislation proposes to identify and control contaminated sites. The NRA has also sought to influence Government policy by commenting, in great detail, on the review paper *Framework for Contaminated Land*. Following Royal Assent to the Coal Industry Act, the NRA has developed memoranda of understanding with the Coal Authority and the major operators of coalfields to ensure that water pollution from operational and abandoned mines is minimised.

POLLUTION INCIDENTS AND ENFORCEMENT

Pollution incidents result from accidents, poor management and a variety of regulated and unregulated discharges.

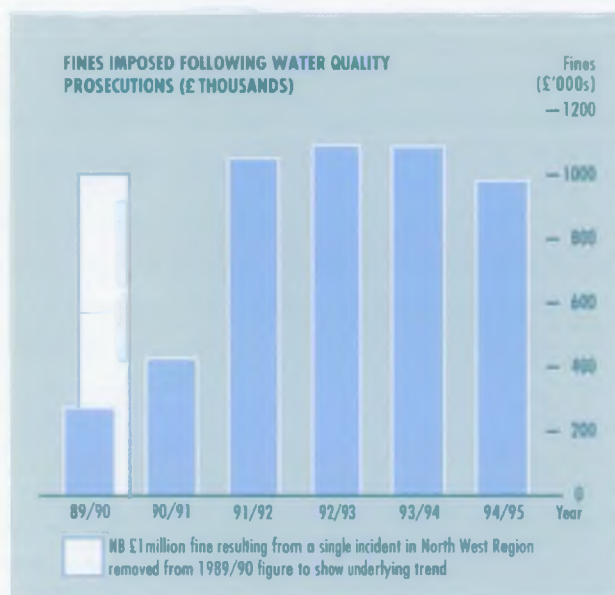
In the calendar year 1994, some 35,000 incidents were reported to the NRA of which 25,415 were subsequently substantiated. These figures represent a small increase on those of the previous year. However, there has been a welcome reduction in the number of the most





environmentally damaging, Category 1, incidents which decreased from 331 in 1993 to 229 in 1994, representing a 31% reduction. The most dramatic falls were seen in the agricultural and industrial sectors, both of which have been directly targeted by NRA pollution prevention initiatives in recent years.

Pollution prevention will always be the most desirable option for the NRA but, where appropriate, we will not hesitate to enforce pollution control by means of legal action. During 1994/95 the NRA undertook 348 prosecutions for pollution offences caused by both breaches of consent conditions and pollution incidents. 316 of these were successful and resulted in the imposition of fines totalling almost £1 million, with costs awarded to the NRA of over £250,000. The largest fine of £30,000 was for an oil pollution incident in Welsh Region. In addition to fines and legal costs, offenders may face heavy clean-up costs. In one case in Anglian Region, although a criminal prosecution was unsuccessful, a subsequent civil court case for the recovery of costs resulted in the polluter having to pay damage and interest costs totalling £107,000.



OPERATIONS

During 1994/95 we dealt with an enormous range of pollution emergencies. Examples include the tracing of contamination to potable water supplies from the River Severn, to dealing with slurry spills on farms, pesticide contamination, oil pollution as a result of an air crash and averting pollution of a watercourse following a fire on a lorry carrying chemicals to mention just a few. At times, the ability to provide a rapid response is essential in order to prevent pollution incidents from turning into environmental catastrophes. This is achieved through carefully formulated emergency procedures and the skills, experience and local knowledge of our field staff who are on continual call.

All of the 35,000 incidents reported during the year were investigated by NRA staff. 93% of Category 1 incidents were attended within our standard service time (within 2 hours of notification during normal working hours or within 4 hours at other times).

W ATER RESOURCES

“ *The aim of the Water Resources function is to manage water resources in order to achieve the right balance between the needs of the environment and those of abstractors.* ”

RESOURCE MANAGEMENT

Rainfall and groundwater levels have been above average throughout the year. There were no drought orders in place during 1994/95 and no immediate resource problems are anticipated.

Throughout the year the NRA has continued to actively augment resources, where required, through the operation of major river regulation schemes. These schemes include the Ely-Ouse Essex Transfer Scheme located in the Anglian region and releases from reservoirs such as Clywedog in Wales for the regulation of flows in the River Severn.

As part of a continuing improvement programme, the Ely-Ouse Essex Transfer Scheme has had its reliability and flexibility increased by the commissioning of an additional pump at the Kennet pumping station. This scheme is capable of transferring up to 454 megalitres of water per day over distances of 148 kilometres. Water is transferred from the Ely Ouse rivers in East Anglia to head waters of Essex rivers to increase their flows and to supplement reservoirs at Abberton and Hanningfield which supply public water to South Essex. Work has continued at Wixoe and Kennet to refurbish existing pumps incorporating the latest pump construction techniques to improve reliability and efficiency. Operational monitoring of the transferred water has been improved by the installation of magnetic flow meters at Kennet and Wixoe. Management of the system has been fully reviewed and documented to ensure that the abstractor's demands, river flow considerations and the plant maintenance requirements can be fully met by the NRA's water resource and operations staff.

LOW FLOWS

During the year considerable effort has continued to be given to rectifying the problem of unacceptably low flows in rivers. Following the identification of the "Top 40" national low flow sites work has focused on these locations. Of the original "Top 40" 8 schemes are now fully implemented, a further 8 have solutions underway, 10 have an identified solution, 6 have ongoing investigations and 8 have been identified as no longer being an abstraction problem.

During 1994/95 solutions were implemented at Blakedown Valley (Severn-Trent), River Sleat (Anglian) and Black Ditch (Anglian).

Work continued on the Shropshire Groundwater Scheme where two further abstraction boreholes were successfully drilled and test pumped. These boreholes completed the phase

three abstraction network consisting of 9 large diameter boreholes which should be capable of discharging up to 50 megalitres per day permissible under this phase of the scheme. A technical report describing the preliminary test pumping of the 9 abstraction boreholes was produced.

The River Darent low flow scheme in Southern region moved forward out of its investigative stage into the implementation of alleviation measures. Detailed negotiations with Thames Water Utilities advanced towards a memorandum of understanding to cover licence reductions and replacement sources and also joint water resources management schemes. Negotiations were well advanced for the drilling of augmentation boreholes.

During 1994/95, preliminary and investigative work required to identify and promote a recommended scheme to alleviate low flow in the River Misbourne in Thames Region was completed. Approval by the DoE and OFWAT was announced in July 1994 when it was agreed that the costs of the scheme could be recovered through future charges from abstractors. The first and main phase of the scheme will be completed in 1998. On-going work by Thames Region includes hydrological and environmental monitoring together with the design of proposals for enhancements to the river channel.

ABSTRACTION LICENSING AND ENFORCEMENT

The development of effective licensing policy is essential to safeguard the environment and to allocate resources equitably. The NRA manages the terms and



conditions of about 49,000 licences throughout England and Wales. During 1994/95 over 1,300 new licence applications were determined, and 3,150 existing licences were varied or revoked. Over 19,000 licence enforcement checks were carried out. In response to the recent upsurge in hydropower applications the NRA has published a manual for staff, outlining policy connected with hydropower schemes.

SURFACE WATER LICENSING POLICY

There is a need to develop a consistent, objective approach within the NRA to the complex task of determining abstraction licences. This activity is fundamental to the way in which the NRA manages water resources and therefore to the progression of the National Water Resources Development Strategy. R&D has been undertaken in 1994/95 aimed at developing a methodology to form the basis of a national approach. The project contractors are working closely with NRA personnel and external organisations to build upon existing good practice and develop a new technique. The methodology is planned to be trialed in all regions and refined and improved in the first quarter of 1995/96.

CHARGING SCHEMES

Funding of the NRA's water resources function activities is derived from charges levied on abstractors. Charges are set so as to recover expenditure on a year by year basis, subject to any adjustments needed to offset a deficit or repay a surplus from a previous year. As a result of accumulated balances refunds were made to customers in 1994/95. 1995/96 will, however, see a return to a more normal rate of charges. Real increases have been kept at 3% or less which is in line with our aim to keep increases in net expenditure at or below the rate of inflation.

HYDROMETRY

Hydrometry is the measurement of the water cycle and is essential to the efficient management of water resources and related functions. During 1994/95 some 25,000 separate river flow measurements and 55,000 groundwater level measurements were carried out. Over 1,200 continuous river flow measurement sites and 900 raingauge sites were in operation as part of the Hydrometric Survey of England and Wales. The NRA uses the data collected from hydrometric sites for all its operational and planning activities. Databases are maintained for research and development and to meet the

needs of Government departments, British Geological Survey, Meteorological Office, other institutions and general enquiries from the public.

During the year an efficiency review of hydrometry within the NRA was completed with the objective of delivering a value for money service which meets customer requirements. 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.

RESOURCE PLANNING

The NRA is responsible for assessing and planning the requirement for water resources at local, regional and national levels and for allocating resources under licence to water companies, industry and others who invest in their own developments.

With the demand for public water supply having increased by 1.5% per annum in the period 1961-69 and resources becoming increasingly scarce, it is essential that new developments are carefully planned and existing resources conserved by managing demand wherever possible.

Following the publication of the NRA's strategy *Water: Nature's Precious Resource* in March 1994, aimed at ensuring that future demand for water will be met in an environmentally sustainable way, work has continued on the preparation of regional reports addressing more local requirements.

During 1994/95 regional strategies were published for Anglian, Northumbria & Yorkshire, Southern and Thames regions. Consultation continues to be seen as an important part of the development of all plans and arrangements are now in place, both at national and regional levels, to ensure that the views of interested organisations are taken into account.

NRA DEMAND MANAGEMENT CENTRE

Demand Management is a major component of the National Water Resources Development Strategy and, in addressing these issues, the NRA Demand Management Centre has made significant progress in 1994/95.

This work includes a review of water company Strategic Business Plan water consumption forecasts on behalf of OFWAT and a major review of national consumption monitoring programmes.

RESOURCE PROTECTION

The protection of water resources is a fundamental requirement for maintaining and developing a sustainable water resources strategy.

The protection of groundwater stored in aquifers is particularly important due to the protracted time it takes for aquifers to recover from pollution. The continued implementation of the NRA's *Policy and Practice for the Protection of Groundwater* ensures a consistent approach to the prevention of groundwater pollution.

Throughout the year the NRA has made progress defining groundwater protection zones. A total of 850 zones have now been defined based on catchments of public supply boreholes. During the year 12 further Groundwater Vulnerability Maps were produced bringing the total published to 16 out of a grand total of 53 maps which will be published at regular intervals over the next 3 years to cover all of England and Wales.



“ The aims of the Flood Defence function are to provide effective defence for people and property against flooding from rivers and the sea; and provide adequate arrangements for flood forecasting and warning. ”

The NRA has a general supervisory duty over all matters relating to flood defence in England and Wales. The majority of our activities are carried out using permissive powers through Regional Flood Defence Committees. Income is raised through levies on Local Authorities and direct grant-aid from MAFF and the Welsh Office for specific flood alleviation schemes.

In practice, Flood Defence operates in three broad activity areas; *prevention* (through planning liaison), *physical works* (construction/maintenance) and *emergency response*.

■ Prevention is better than cure. Building in the floodplain means that more houses are vulnerable and less land is available to store flood waters. We endeavour to direct development away from flood risk areas by influencing Local Planning Authorities' Development Plans and commenting upon individual planning applications.

■ Where property has already been constructed in the floodplain, we will seek to protect it by constructing and maintaining flood defences where these works are economically, technically and environmentally sound

■ There are occasions when flooding is inevitable, when a flood exceeds the level for which the defence was designed or where no defences are in place. In these circumstances we will seek to provide and operate a flood warning system where sufficient prior flood warning time is given.

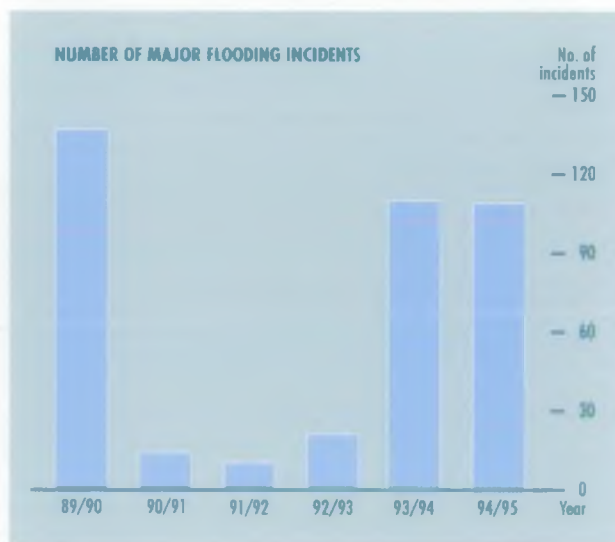
The *NRA Flood Defence Strategy* sets out how we intend to carry out flood defence work effectively and efficiently for the benefit of the community whilst at the same time ensuring that we protect the water environment. The Strategy complements the MAFF/Welsh Office *Strategy on Flood and Coastal Defence*, MAFF *Project Appraisal Guidance Notes* and published guidance on Water Level and Shoreline Management Plans.

FLOODING INCIDENTS

Despite exceptionally heavy rainfall across the country, and indeed across much of Europe, in the winter period, flooding to people and property across England and Wales was relatively restricted. Only 350 out of some 850,000 properties which are protected by NRA defences were affected by flooding. This reflects both the continuing

programme of investment in capital and maintenance works and the operational expertise and capability of the workforce and local management in providing round-the-clock emergency cover.

Problems were experienced in January and February when rainfall in some areas exceeded double the average for the time of year. In Northumbria & Yorkshire 'flows of the century' occurred on several rivers, caused by a combination of snowmelt and torrential rain. Red warnings were issued on a number of rivers including the Tyne, South Tyne and Wear, with flood levels further raised by high tidal levels.



In North West Region, where some rivers were at their highest level for 60 years, over 170 properties were affected by flooding. Particularly badly hit was the town of Appleby, where ironically a flood alleviation scheme had just been started.

In South Western Region, 126 flood warnings were issued in this two month period alone. The Somerset Levels were inundated for a considerable period, causing agricultural damage, whilst elsewhere there was some flooding to property. As in the rest of the country, staff worked around-the-clock to alleviate damage. Flood defence schemes at Axminster and Newton Abbot, amongst others, prevented serious flooding.

In Anglian Region, high tides and gale force winds led to a major tidal surge on 1 and 2 January 1995 resulting in damage to sea defences along the Norfolk coast. Quick response by the emergency work force and the effective

operation of the flood warning system ensured that the damage potential was minimised.

In Thames Region, high flows on the River Thames and tributaries coincided with surges on high spring tides. The Thames Barrier was closed on four occasions to prevent serious flooding.

PLANNING AND DEVELOPMENT CONTROL

The NRA believes that prevention is the most effective flood defence, and has been working throughout the year with Local Authorities, putting into place a programme of floodplain surveys that will influence development decisions for years to come. This follows publication of the DoE/MAFF/Welsh Office Circular 30/92, *Development and Flood Risk*, and the Memorandum of Understanding subsequently agreed by the NRA and the various representative Associations of the Local Planning Authorities (LPAs).

It is planned that each region will undertake a five-year rolling programme of surveys and modelling, starting with the highest priority catchments. These will map out floodplain envelopes and those areas which are already given increased flood protection by existing defences. LPAs are required to have due regard to these maps in drawing up their Local Development Plans, and, as a result, inappropriate development should be avoided.

In addition to providing input into planning applications through our role as a statutory consultee, direct consent is required from the NRA for proposed developments which are likely to have a direct impact on

main watercourses. In 1994/95 the NRA determined 6,590 new consents; 99% of all applications were determined within the two month statutory period.

CAPITAL WORKS AND MAINTENANCE

In 1994/95 over three million House Equivalents across England and Wales received increased protection as a result of NRA maintenance works on over 34,000km of existing flood defences. In addition, 102km of new or improved defences were constructed providing better flood protection to over 53,000 House Equivalents.

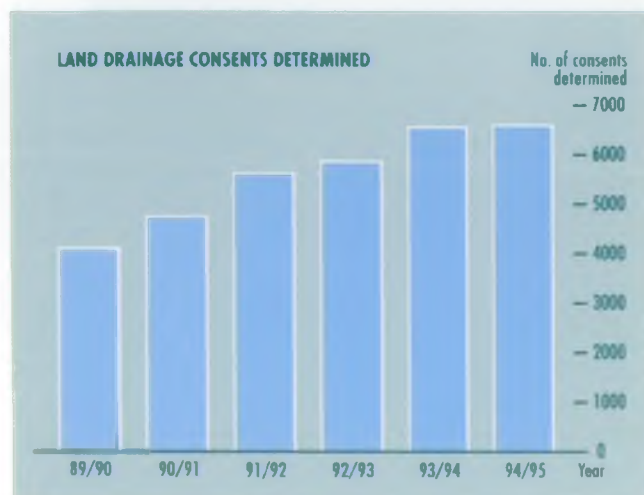
Considerable progress has been made in developing the Flood Defence Management System, which combines databases on Standards of Service and asset management. This provides a tool to allow identification, justification and prioritisation of works, as well as storing a very large quantity of data. User requirements have been defined during the year, and 1995/96 will see the system delivered to a pilot region with other regions following thereafter.

FLUVIAL DEFENCES

For Flood Defence purposes there are two categories of watercourse - 'main river' and 'non-main river'. The NRA has greater operating powers over main river; for example, we can promote capital works for flood alleviation purposes. For historic reasons, the approach to categorising rivers has not been consistent and many urban water courses are not classed as main river. A national set of guidelines, to be used when deciding whether to seek to 'enmain' a river, has been agreed. This will be applied consistently in future when it is felt that there is a need to review the status of a watercourse.

The difficulties experienced in Europe over the winter period have again demonstrated the importance of successful and effective multi-agency work. One of the best ways of doing this is through activities such as Catchment Management Planning, where the NRA consults with various interested parties in developing its work plans for specific areas.

In July MAFF published a document, *Water Level Management Plans*, developed in conjunction with the Association of Drainage Authorities, English Nature and the NRA. This provides a means by which a range of activities in an area, including agriculture, conservation and flood defence, can be balanced and integrated. The NRA has been working with English Nature during the year to develop an agreed



IMPORTANT FLUVIAL SCHEMES WITHIN THE YEAR'S CAPITAL PROGRAMME INCLUDED –

■ In Northumbria & Yorkshire Region, Phase 3 of the River Sheaf Flood Alleviation Scheme was completed in Sheffield, providing benefit to 150 commercial and residential properties. The North Street (York) scheme, designed and project managed in-house, was commended by the Yorkshire Association of the Institute of Civil Engineers for its "excellence in concept, design and execution". Flood warning plays an important part in the overall Flood Defence strategy, and within the Region a better focus was developed for the warning systems.

■ In South Western Region an embankment dam was built on the River Allen at Idless as part of an overall project to reduce flooding to Truro in Cornwall. Together with a dam on the River Kenwyn and tidal defences, this completes the work identified following the two serious flooding incidents in 1988.

■ In Southern Region significant work and consultation has been undertaken to identify the causes and possible solutions to the flooding in Chichester in the previous winter. This work is well underway, and options for alleviating future problems are being considered.

■ In Thames Region approval was finally gained for the flood alleviation scheme at Maidenhead, Windsor and Eton following a public inquiry in 1993. This scheme involves the construction of an 11 kilometre landscaped diversion channel which will take some of the flood waters from the River Thames and give increased protection to thousands of people.

■ In Severn-Trent Region efforts to promote a £4.4 million flood alleviation scheme in Shrewsbury were set-back when planning permission was refused. The submission of a revised application is being considered. Major contracts completed included the £1.3 million River Lyd scheme, Gloucestershire, and the £1.3 million Rylands wall scheme on the River Trent at Nottingham.

■ In Welsh Region a major flood alleviation scheme at Pontypridd, costing £0.5 million, has been completed.

■ In North-West Region work progressed on the £4.0 million scheme at Crossens Pumping Station, and work began at Appleby after considerable local consultation.

programme of work for developing these Plans. These will then dovetail with Catchment Management Plans to provide a planned and consensual approach to the management of these environmentally important sites and enhance the NRA's role as effective 'Guardians of the Environment'.

The Flood Defence function of the NRA spends around £130 million every year building or replacing defences. Of this, half is spent on river works. Each region of the NRA has its own programme designed to alleviate flooding problems which are prioritised to ensure that the best value for money is obtained.

SEA AND TIDAL DEFENCES

Development has taken place through the year of a framework for future updates of the *Sea Defence Survey* (SDS). This survey covers all NRA, Local Authority and privately owned sea defences, and complements MAFF's *Coast Protection Survey*. It is the NRA's aim to merge the SDS into the same format given in the Flood Defence Management Manual, thus ensuring that fluvial and coastal assets data are stored and treated in the same manner.

The NRA has considerable interest in coastal issues and seeks to influence management of the coast. The voluntary, sectorial approach to coastal management does not necessarily produce integrated and comprehensive plans, so the NRA works hard to liaise with other agencies to avoid unnecessary overlap or conflict, for example with English Nature in estuarine areas. The NRA is a member of all the Coastal Cell Groups in England and Wales and is preparing Shoreline Management Plans to inform its work programmes and trigger discussion with interested parties at an early stage.

FORECAST AND WARNING SERVICE

Flood warnings were issued to the police for 62% of properties which were subsequently affected by flooding during the year. The effectiveness of the flood warning system is constantly reviewed, and discussions have been taking place between MAFF, Welsh Office, NRA, police and local authorities to see if a more effective warning dissemination process could be employed. It has now been agreed by the various parties that the NRA, subject to Board approval and clarification at Ministerial level, will become the lead agency in directly alerting the public to the dangers of imminent flooding. This will allow the police to take a more effective role in the overall emergency response activities as their

IMPORTANT TIDAL AND COASTAL SCHEMES WITHIN THE YEAR'S PROGRAMME INCLUDED –

■ In Anglian Region the construction of the first of four reefs was completed off the Happisburgh – Winterton frontage.

Commencement of the Lincshore Project saw the placement of 625,000 cubic metres of beach nourishment material. This scheme provides protection from tidal inundation for 35,000 people along 20km of the Lincolnshire coast. Commencement of Phase 2 in August 1995 is dependent on the granting of a dredging licence for abstraction of up to 12 million cubic metres of sand.

■ In Northumbria & Yorkshire Region, the River Hull Comprehensive Scheme, costing £22 million over 20 years, has improved defences over 30km of the river and gives protection to 21,000 hectares of land including much of Hull. The Goole Tidal Defences have been completed at a cost of £3 million. Work took place on over 10km of river and provides an increased standard of protection to 8,000 properties in Goole.

■ In South Western Region a major flood defence scheme costing £6 million was completed at the Barbican, Plymouth, as a joint venture with the Southern Harbour Company. A £1.2 million tidal defence scheme in the Braunton area of North Devon was started.

■ In Southern Region the £6 million St. Mary's Bay Sea Defence Scheme was completed, as was the £5.6 million Pennington Sea Wall, undertaken with Hampshire County Council. A major scheme was started at the Northern Sea Wall at Thanet, Kent.

■ In Severn-Trent Region, reconstruction of tidal defences along the River Severn continued at several locations, and included the completion of the £2.2 million Binn Wall Contract 2 near Severn Beach.

■ In Welsh Region a £1.4 million scheme was completed at Dinas Dinlle in North Wales, where sea defences were improved by a combination of managed retreat, beach nourishment and rock structures.

■ In North West Region, works were completed on an alleviation scheme at Haverigg. The village had suffered 5 major events since 1967 from tidal flooding. Investigations and design to alleviate flooding at Overton, Middleton and Skinburness were completed.

resources can be better targeted. The new system is scheduled to commence in September 1996.

One of the main method of passing information to the public is by local radio which is keen to play a part in this community service. A variety of other techniques are also being investigated including pre-programmed direct dialling to peoples' homes, flood wardens, sirens and *ceefax*. Two trials were carried out over the last winter to assess options available to the NRA, on the Isle of Wight and in part of Lincolnshire. These went well and much valuable experience was gained.

MARKET TESTING

The drive to demonstrate value for money and improve efficiency has continued through the year. In-house design was out-sourced through a negotiated takeover with a firm of external consulting engineers to whom the majority of NRA employees transferred. A number of staff remained directly employed by the NRA as an 'intelligent client' to ensure that sufficient expertise is retained in-house. The contracting-out of Mobile Plant and Transport Maintenance was also successfully completed, yielding larger savings than originally anticipated.

Significant improvements have been gained from reviewing the efficiency of the in-house workforce and we will continue to ensure that the best value for money is obtained from all aspects of the Authority's work.

“*The NRA’s aim in relation to fisheries 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.*”

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ISHERIES

LICENSING

We have continued to ensure that salmon, trout, coarse fish and eel fisheries in England and Wales are regulated by a sound system of licensing to help conserve and maintain stocks.

In March 1994 we introduced a two-tier licence, consisting of a trout and coarse licence and a salmon and sea trout licence, which is valid for all species. The introduction of the two-tier licence followed an exhaustive consultation in which the views of a wide range of individuals, organisations and our own Advisory Committees were received. Two new short-term licences, one an 8-day and the other a 1-day licence, were also introduced.

Following a successful pilot scheme for selling rod licences through the Post Office in 1993, 1994/95 saw all 17,000 Post Offices in England and Wales participating in rod licence sales, as well as some 300 retained bankside outlets. Administration of all licence agents was carried out by the newly formed NRA National Rod Licence Administration Centre in Warrington.

Rod licence sales for 1994/95 topped 1 million for the first time since the national licence was introduced in 1992. This represented an increase of 12% over the previous year's sales. The improvement can be attributed largely to the eight-fold increase in licence outlets, to the introduction of the one-day licence and to improved enforcement activities.

Information leaflets on NRA fisheries work and the 1995/96 rod licence have been produced and are available at Post Offices and NRA offices throughout England and Wales. 1995/96 rod licences went on sale in March 1995.

The review of net licensing continued in 1994/95 with the production of a discussion paper in October 1994 entitled *Net Licences for Migratory Salmonids - Options for Future Structure & Duties*. The document, which proposed options for a consistent, equitable system for net licence duties, was issued to a wide range of individuals and organisations with an interest in salmon and sea trout. Responses were sought by 31 January 1995 and collated to produce a paper which was presented to the National Fisheries Committee in March.

The results of an R&D project *The Socio-economic Review of Angling* were published in February 1995.

The report, *National Angling Survey 1994*, summarises the main findings of the research, which was undertaken by NOP Social and Political. The research indicated that there are 2.2 million potential NRA rod licence holders i.e. people aged twelve and over who had been freshwater fishing in England and Wales during the year preceding the survey (i.e. in 1993). It also indicated that the proportion of freshwater anglers who fished without a rod licence was at least 13% and possibly much higher.

The survey also sought anglers' views on a measure to combat licence evasion, that of compulsory rod licence display by anglers when fishing. The survey indicated that 65% of freshwater anglers thought that this would achieve a reduction in evasion.

BYELAWS

Following an extensive review of the coarse fish close season and public consultation in 1993/94, we issued our proposals in June together with a rationale document which outlined the reasoning behind the proposed changes to the byelaws.

The byelaws were advertised in the national and angling press and objections to the byelaws were received up to the end of October. We made our submission to the Ministry of Agriculture, Fisheries & Food and the Welsh Office in December, and on 13 March 1995 the byelaws were confirmed. The approved byelaws introduced a close season from 15 March to 15 June on all rivers and streams; dispensed with the statutory close season on all lakes, ponds and reservoirs except in the Norfolk Broads and certain SSSIs; and retained the status quo for canals.

Consideration was given to other fisheries byelaws to gauge which would need reviewing on a national, regional or local basis.

NET LIMITATION ORDERS

We have established a national project group to examine the issues surrounding Net Limitation Orders (NLOs). NLOs are the means by which the NRA can limit the number of netting licences which may be issued for migratory salmonids.

Representatives from the regions have met with MAFF and Welsh Office officials to review the basis for issuing

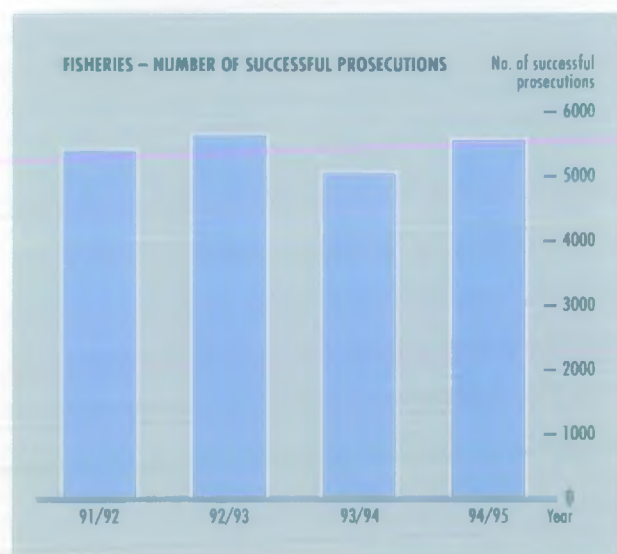
NLOs. New NLOs were advertised for the Welsh and Anglian Regions, and were the subject of extensive consultation with fishing interests.

ENFORCEMENT

Rod licence enforcement practices were reviewed in the light of the *National Angling Survey 1994* which indicated that there may be a high proportion of freshwater anglers who fish without a valid rod licence. The review of rod licence checking was initiated to provide greater consistency and to improve effectiveness and efficiency in combatting rod licence evasion.

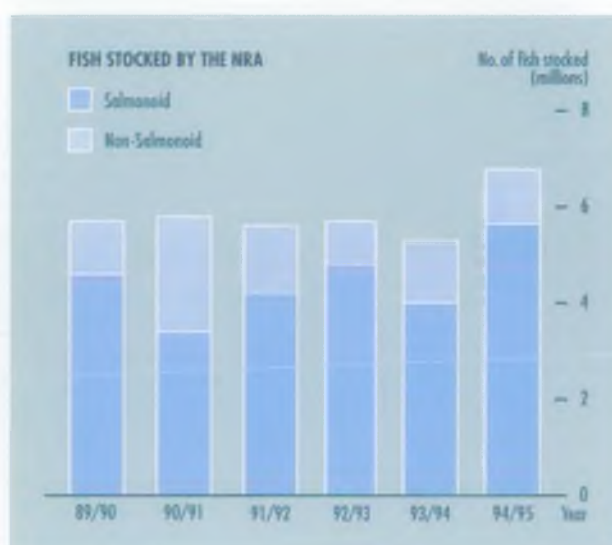
During the year, over 237,000 licence checks were made. 5,076 prosecutions were brought for licence offences of which 4,649 were successful and resulted in fines of approximately £182,000. In a number of cases custodial sentences were imposed. A further 991 prosecutions were taken for byelaw and other offences of which 933 were successful resulting in fines of over £42,000.

An anti-poaching enforcement group was set up to increase the effectiveness of anti-poaching measures employed by the NRA. Anti-poaching is a high cost area particularly with respect to migratory salmonid fisheries where enforcement costs represent the highest single area of expenditure. In the light of grant-in-aid cuts, there is a particular need for us to make any possible efficiency savings.



REARING & STOCKING

Implementation of the fish culture review continued through the year with further rationalisation of our fish production sites. As recommended by the review, we ceased to produce stocks of migratory salmonids for enhancement purposes, and now buy-in the majority of brown trout from the commercial sector for stocking. Calverton Fish Farm has been expanded to become the NRA's national centre for coarse fish production. Annual fish production capacity at Calverton has increased from 200,000 to 300,000.



In total during 1994, almost 8 million salmonid and 2 million coarse fish were reared by the NRA and 5.7 million salmonid and 1.2 million coarse fish were stocked out to rivers throughout England and Wales. Stocking programmes included the restocking of 90,000 young coarse fish to the rivers Upper Witham, the Great Ouse and the Nene in East Anglia following fishery improvements; the stocking of 4,000 young salmon to the River Torridge, as part of a major rehabilitation programme, and 50,000 brown trout released into tributaries of the rivers Esk and Liddle in the Borders region.

During the year we produced an R&D report entitled *The Identification of Cost Effective Stocking Strategies for Migratory Salmonids*. The research identifies the potential waste of resources and risk to fisheries which can result from ill-considered stocking programmes. It also highlights the need for consideration of alternative methods of stock enhancement such as habitat improvement. If stocking is

FISHERIES

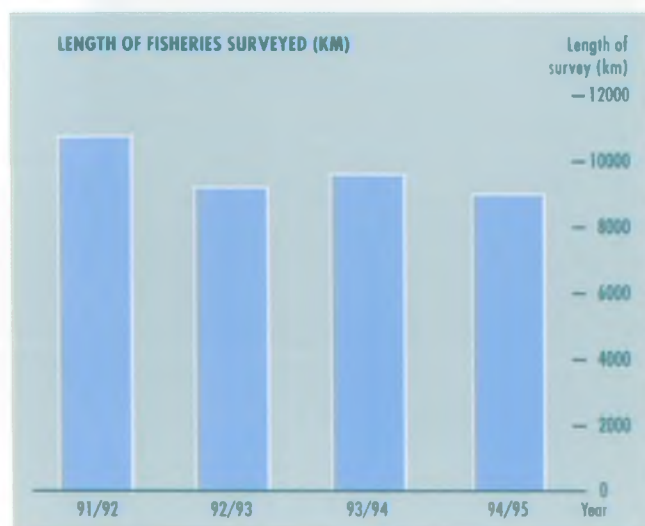
considered appropriate, the need for careful planning and monitoring is recommended.

MONITORING

Fish monitoring surveys provide us with information relating to fish population structure, fish health and species composition. These data, when compared with historical data and expected results, determine any work that needs to be done in order to maintain, improve or develop fish stocks and thereby support effective fisheries management.

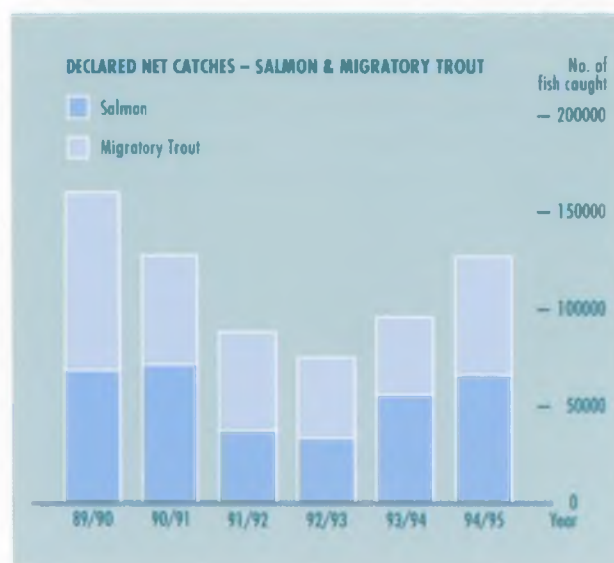
Monitoring and surveys of fisheries involve the use of electric fishing, netting, fish counters, traps and the use of catch statistics. Surveys representing 9,000km of river length were conducted during the year. Information derived from the surveys also enable the NRA to comment on fisheries interests in thousands of planning applications throughout England and Wales and provide fisheries staff with the information they need to make appropriate input into the Catchment Management Planning process that is the cornerstone of the NRA's integrated approach.

Fish health monitoring and investigations continued to be carried out, with the NRA regions and fisheries laboratory at Brampton completing over 1,200 fish health investigations and fish ageing analysis undertaken on some 76,000 specimens.



CATCH STATISTICS

The fifth NRA annual publication, *Salmonid & Freshwater Fisheries Statistics for England and Wales 1993* which was published during the year showed that declared



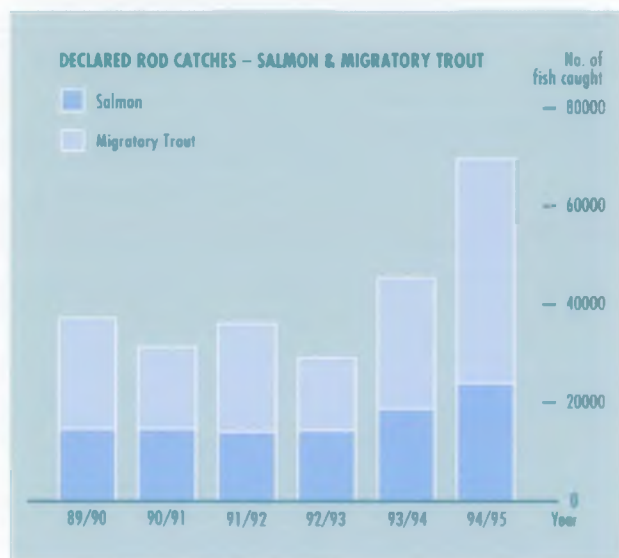
net catches of salmon were 67% higher than in 1992. Figures for the 1994 season, which are not yet published, reveal that the declared catch increased again by 17% above the 1993 figure to stand at 24% above the average for the preceding 5 years.

Whilst sea trout net catches in 1993 continued the downward trend observed since 1989, declared catches for 1994 were up by 53% on 1993 and 9% above the preceding 5-year average.

Reported rod catches in 1993 showed a big improvement on 1992 and this continued in 1994. The declared catches in 1994 for both salmon and migratory trout were the highest since 1988 and were above the preceding 5-year average figures by 56% and 120% respectively.

For the first time the 1993 report included figures for rod catch rates, expressed as catch per licence day, and the proportions of rod-caught fish that were released. On average 1 salmon in 10 and 1 sea trout in 3 were released in 1993. Comparative figures for 1994 show that 1 in 7 salmon and 1 in 3 sea trout were released, and that in both years, these comprised mainly small fish.

With the introduction of the 2-tier licence in 1994/95 we were able, for the first time, to identify all salmon and sea trout rod licence holders. This allowed us to send out a catch return reminder, which included feedback for 1993 rod catches and information on how to contribute to the North Atlantic Salmon Fund (UK). The reminder produced a



considerable response, with some 19,500 letters returned for the 1994 season compared with 7,100 for 1993.

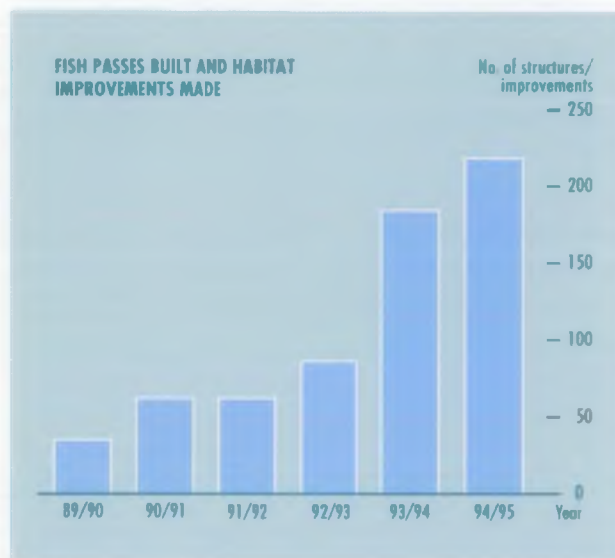
PHYSICO-CHEMICAL IMPROVEMENTS

There have been over 200 fishery habitat improvements completed this year, including the construction of over 50 fish passes and screens which facilitate greater access by fish, particularly migratory salmonids, to spawning and nursery areas. Other improvements include cleaning of spawning gravels, creation of riffles and pools and bankside improvements.

In Northumbria & Yorkshire Region habitat improvements on the River Rother have continued with the construction of a weir to create a stillwater environment suitable for bream, roach and chub and shallow, fast-water for fish such as dace and barbel.

A stream enhancement project was completed at Sarston Beck, a tributary of the River Waveney in Anglian Region. The bed of the stream has been altered, without changing its natural appearance, to create gravel beds, a short series of narrow meanders and pools, all of which will be very attractive to coarse fish. Planned bank improvements include the planting of ash, alder and native shrubs.

In Welsh region, the NRA worked in conjunction with the Wye Salmon Fisheries Owners Association on improvements to important salmon spawning areas in the Upper Wye Catchment. Work included removing fallen



timber and other debris which was blocking access to upstream spawning habitat. Access to spawning gravel is vital, but so is quality, and other work involved adapting a JCB bucket to rake over the top inches of compacted gravel. There was an increase in fish use in areas which had been improved.

REVIEW OF FISHERIES ACTIVITIES

A review of all fisheries activities was initiated in 1993/94 and completed in May 1994. The main aim of the review was to provide a basis for identifying priorities and making strategic changes in areas of activity and expenditure. It also provided a justification for the maintenance of grant-in-aid funding for those statutory duties which benefit the general public rather than individuals or specific groups and furnished a framework for further policy developments.

On completion of the review, recommendations were agreed and distributed to regions for implementation. Foremost amongst the recommendations was that the NRA will not increase trout and coarse licence duties to pay for a shortfall in salmon and sea trout fisheries expenditure. As a result the service provided for salmon fisheries could be reduced if grant-in-aid from Government continues to fall.

C ONSER- VATION

“ Our principal aim is to conserve and enhance wildlife, landscape and archaeological features associated with inland and coastal waters of England and Wales. Rivers, lakes, wetlands and coastal habitats are all important contributors to biodiversity. Helping to maintain and enhance the variety of features and associated wildlife of these areas is a key responsibility for the NRA. ”

The main activities supporting our principal aim in relation to Conservation are threefold:

- **Assessing and monitoring conservation interest.** This has included implementing standard survey methodologies such as River Corridor Surveys and River Landscape Assessment. We are developing a classification capability through River Habitat Survey.
- **Ensuring that the NRA's regulatory, operational and advisory activities take full account of the need to sustain and further conservation.** All NRA work (e.g. flood defence) and third party applications for land drainage, fisheries and discharge consents and abstraction licences are appraised for their potential impact on conservation interest. Advice on conservation enhancement is also provided to mitigate unavoidable impacts.
- **Promoting conservation to enhance the quality of the aquatic and related environment for the benefit of wildlife and people.** Promotion includes internal and external publicity material, and taking part in collaborative projects at national, regional and local level.

All these activities are set out in the *NRA Conservation Strategy* published in 1993.

APPRAISAL SURVEYS

We continue to use River Corridor Surveys for providing operational advice on how best to avoid damaging important features and enhancing degraded sites during our flood defence works. Over 6,000kms of river corridor were



surveyed in 1994/95. We are also continuing to explore ways of using aerial surveillance for providing an overview of both coastal and river corridor habitats. Around 650km of aerial survey was carried out during the year.

RIVER HABITAT SURVEY

During the year we finalised the field methodology for River Habitat Survey (RHS). The outputs of RHS have provided us with a national computer database, a scheme for categorising different river types based on expected habitat features, and a working classification of site quality which complements that for water quality. These outputs have been produced on the basis of more than 1,500 reference sites throughout England and Wales surveyed by NRA staff and with the assistance of the Institute of Freshwater Ecology. Refinement is now taking place with an additional 3,000 sites being surveyed in 1995 and 1996.

We are now collaborating with the River Purification Boards in Scotland and colleagues in Northern Ireland to provide a UK-wide network in developing a truly national scheme.

RHS has already been used by Snowdonia National Park in an environmental assessment of hydropower proposals on small upland streams. We intend to produce an inventory of river features based on the national database in early 1996.

ENVIRONMENTAL APPRAISAL

Conservation staff provide an internal technical audit of the Authority's activities and consistency in quality checking is essential. We have now produced, in advanced draft form, a scoping checklist for more than 60 types of development. This will provide national consistency and also clear guidance for external developers who need to know what potential impacts their proposals may have on conservation interests as well as on other NRA functions. The document will be circulated to external organisations for comment prior to publication in early 1996.

In 1994/95 conservation staff appraised more than 9,000 applications for land drainage, fisheries, discharge consents and abstraction licences. In addition almost 9,000 planning applications were screened for conservation implications. Major developments commented on during the year included proposals for the Manchester Airport extension, the upgrade of the West Coast rail route from London to Scotland and the Usk barrage.

Conservation input and advice was achieved on all NRA projects requiring a formal Environmental Statement. 438 NRA new capital works completed during the year incorporated conservation enhancements or mitigation.

Conservation input to Catchment Management Plans continued to develop, enhanced by an internal checklist guidance for conservation staff. This was included in English Nature's *Conservation in Catchment Planning* handbook published in January.

ARCHAEOLOGICAL CONSERVATION

Following the review of our archaeological responsibilities in 1993/94, we produced internal guidelines on archaeology. This includes the scope of our duties, procedures for external liaison and consultation, guidelines for operational activities, a draft model brief for field archaeological services and guidance on access to archaeological databases. This document has been promoted internally and is included in the *1995 NRA Conservation Directory*. It also provides the necessary detail for the archaeological component of environmental appraisal scoping.

As an example of promoting archaeological interest, we collaborated with Hereford City Council and Herefordshire Nature Trust to reinstate ancient stones in the Lugg Meadows marking the boundaries of commoners' land which date back to medieval times.

SPECIES ISSUES

A report commissioned through our R&D programme has identified, from more than 1,000 plant and animal species associated with freshwater and water-dependent habitats, a priority short-list of 76 species. This includes both rare species and those which cause problems.

Several of the priority species will be included in the UK Biodiversity Action Plan. We are represented on the Biodiversity Action Plan Steering Group and continue to provide advice for both species and habitat action plans. As an example, we are collaborating with the Countryside Council for Wales and English Nature to produce a management strategy for *allis* and *twait* shad, two species of rare migratory fish which are particularly vulnerable to barrages across estuarine waters.

Following our *Otter Management Strategy* produced in March 1994, we have produced a management action map of

England and Wales based on catchments. We continue to support otter surveys often jointly with specialist groups, the Wildlife Trusts and commercial sponsors.

There has been widespread concern about the recent decline of water voles ("ratty" of Wind in the Willows) and we are turning our attention to this likeable character. We are supporting a research project on the interaction between mink and water voles in the Upper Thames catchment.

Native freshwater crayfish have also declined, mainly as the result of a fungal disease spread by escaped alien crayfish. Our commissioned R&D project on crayfish was completed by Nottingham University in March and has made a significant contribution to the JNCC national crayfish conservation strategy which went out to public consultation in December.

Another species now suffering from fungal disease is the common alder tree, an important landscape feature of streams and rivers in many areas of the country. In association with the Forestry Authority, surveys are being carried out to assess the extent of affected trees. A publicity leaflet has also been produced. The impact of the disease, which affects the roots of alders, could be devastating for the landscape and also have serious implications for river bank stability. Early indications suggest that up to 20,000 trees may be affected in Central and Southern Britain with certain catchments in South East Wales being particularly badly affected.

Several alien species of plants introduced into Britain for ornamental reasons have now become established along river banks. These include Giant Hogweed (which poses a serious health hazard, the sap producing severe skin blistering), Japanese Knotweed and Himalayan Balsam. Each spreads rapidly along rivers and can displace native plant species. In September we published a small booklet for identifying these invasive plants which gave advice on how to deal with them. This was based on results of an R&D project carried out by Loughborough University.

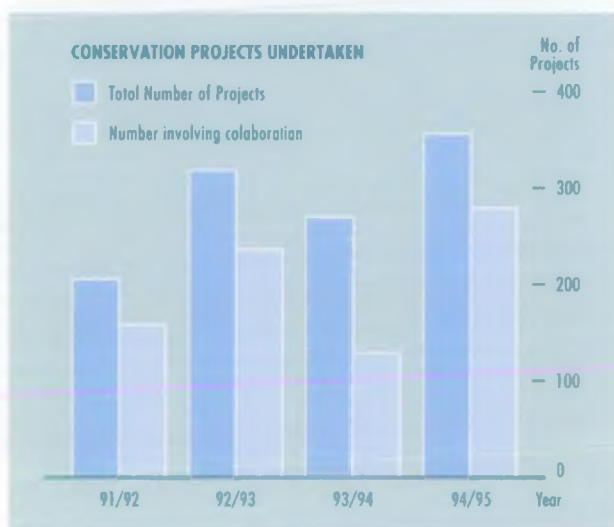
Cormorants and other fish-eating birds continue to create intensive media coverage in the angling press. We are pleased that recommendations from our commissioned R&D report *Fish-eating birds: assessing their impact on freshwater fisheries* written by ITE and published in 1994 have been taken up by the licensing authorities. We are now contributing to a £1 million multi-project R&D programme led by MAFF and DoE and will be represented on the steering group. In the meantime, we acknowledge that in certain circumstances such

as stillwater fisheries, cormorants can have a significant impact. We still consider the only long-term solution is a coordinated management strategy.

COLLABORATIVE PROJECTS

In June 1994, Sir David Attenborough launched *The New Rivers & Wildlife Handbook*, a joint publication between the NRA, RSPB and the Wildlife Trusts. Demand for the handbook, which has come to represent the river engineers' "bible", has been high and it is now being reprinted. We continue to implement proven environmental practices cited in the handbook and explore possibilities of new techniques to ensure minimum impact on habitat features and maximum enhancement of conservation interest.

As part of the review of the coarse fish close season, we promised to produce guidance on the management of fisheries to benefit wildlife conservation. In conjunction with English Nature and the Countryside Council for Wales we produced draft guidelines which went out to public consultation in January. *Fisheries Management & Wildlife Conservation* and a publicity leaflet are scheduled to be published in November 1995.



More than 34 initiatives and projects, including R&D, involved collaboration with English Nature in 1994/95. Other key partners include the Wildlife Trusts, RSPB, National Trust and the Countryside Commission.

In all, 279 collaborative projects were undertaken in the regions. One such example was the wetland habitat creation and hide construction project at the Wildfowl & Wetlands Trust Centre at Slimbridge.

The NRA board agreed in June that we should become principal partner with River Restoration Project Ltd in an EU LIFE project on river restoration. Two demonstration sites, on the River Skerne at Darlington, the other on the River Cole near Swindon will be modified by reinstating meanders. The objective is to assess the cost-effectiveness and technical feasibility of full-scale river restoration and this will help us to determine the scope and effort needed for future schemes.

WETLANDS

Background work on the classification and management of wetlands continues. An R&D project on wetland classification was completed during 1994/95 and we shall publish it in our *Conservation Technical Handbook Series*.

We helped to write the guidelines on Water Level Management Plans published by MAFF. Our regions will be preparing plans as part of a four-year programme with priority going to wetland SSSIs.

Collaborative projects with a wetland focus include Anglesey Wetlands, Long Eau Washland scheme (Anglian Region) and Narborough Bog SSSI (Severn-Trent Region). We also helped the National Trust reinstate a water meadow system with 10kms of ditches at Sherborne in Gloucestershire.

EUROPEAN SITES AND SITES OF SPECIAL SCIENTIFIC INTEREST

1994 saw the confirmation of Regulations to implement the European Union Habitats Directive. This represented the most important conservation legislation since the Wildlife & Countryside Act was passed in 1981 and there are significant implications for NRA policy and operational activities. After consultation with English Nature, DoE and MAFF we produced internal guidance for NRA staff. In March, the Government published a list of candidate sites for Special Areas of Conservation (SACs) which included areas we either partly own or have significant influence over. We have a major responsibility for helping to protect river, wetland and some coastal SACs when they are designated from 1998 onwards.

All SACs have to be already notified as Sites of Special Scientific Interest (SSSIs). We have been in close liaison with English Nature to draw up protocols and agreed actions on river SSSIs in relation to river management and water quality issues. These will be formalised in 1995/96 as part of a Memorandum of Understanding and should streamline procedures, clarify responsibilities and identify common objectives as part of a conservation strategy for each site.

*N*AVIGATION

“ Responsibility for inland navigation in England and Wales is shared between the NRA and a number of other authorities, principally British Waterways and the Broads Authority. The NRA manages some 800km of inland navigations with approximately 40,000 boat registrations which involve some 550,000 participants. In addition, an estimated 10.5 million recreation visits are made to these navigations for the purposes of walking, rambling and sightseeing with lock sites being a focus of attraction. ”

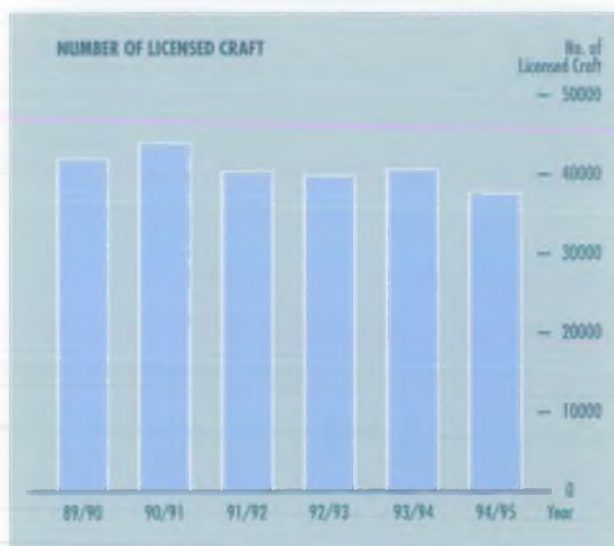
In 1994/95, the navigation function had to manage further reductions in grant-in-aid. With the number of boat registrations declining, price increases were set at or only slightly above inflation in order to avoid diminishing returns on overall income. Inevitably this meant reduced expenditure, which had a detrimental effect on the capital works programme and caused some deferment of maintenance work to locks. In spite of this, the commitment of staff ensured that water-borne users and bank-side visitors were provided with an excellent service.

In Anglian Region a survey of all registered boat-owners was undertaken and revealed user requirements which will influence the provision of facilities.

To complement the NRA's statutory advisory committees an inaugural meeting chaired by John Wheatley (Board Member) was held with representatives of national user and trade bodies. This National Navigation Users Forum will now meet regularly and will form an important means of consulting and involving those who use the navigation service in its future direction and management.

NAVIGATION ACTIVITIES REVIEW

In 1994 a detailed review of navigation finances was proposed. During the year the scope of this review was considerably expanded to examine all aspects of finance and activities. Most phases of this ten-point review were completed and revealed critical information which immediately influenced activities and policy.



The NRA operates on each of its regional navigations separate and slightly different boat registration and licensing schemes. This creates a number of anomalies such as variations in charging periods and categories of vessels. Investigation revealed that anything other than minor changes to improve the service for users or to develop a more efficient administrative system would require modification of local navigation legislation. The Transport and Works Act provides a means of change. A model scheme has been developed and will form the basis of a detailed consultation process with users in 1995 prior to the development of any proposals.

However, it was possible to introduce for 1995/96 a free 14-day visitor licence arrangement which will allow and encourage boats registered on any NRA navigation to utilise other NRA navigations. The success of this scheme will be reviewed in 1996 and it is hoped that other improvements to services will be introduced.

The review also revealed to what extent the navigation function is an integral part of the NRA's other river management functions. This is demonstrated by a variety of multi-functional operational activities and the role of weirs and sluices which provide, in varying degrees, benefits for flood defence, navigation and water resources. Operational arrangements and attribution of costs between functions reflect local circumstances and hydrological requirements.

A research project was initiated to investigate factors that influence participation in boating, in particular the effect of increase in licence charges on demand. Based upon a review of existing and limited data an interim report revealed that boat users are part of a highly segmented market. This information is being used in a promotional campaign to target potential newcomers to recreational boating. More detailed and original market research will be needed to develop a detailed understanding of price/demand relationships.

With the final stages of this review completed an analysis of all components will be finalised in 1995 and will almost certainly influence the development of the NRA's navigation function.

DOE REVIEW OF NRA AND BW NAVIGATION FUNCTIONS

In February 1995, the DoE published a long-awaited consultation paper on the split of navigation responsibilities between NRA and British Waterways (BW). This continued a review which began in 1991. In the preparation of its response

the NRA sought the advice and comments of its Regional Advisory Committees. The NRA's response stressed the importance of developing a coordinated plan to protect and develop inland waterways, based on improved liaison and collaboration amongst all 26 inland navigation authorities. It calls for the creation of a national inland navigation strategy, an umbrella federation of inland navigation authorities and the transfer of responsibility of a number of inland navigations from BW to the NRA.

At the level of individual rivers we believe that some navigations presently managed by BW might be more effectively managed by the NRA. Our system of Catchment Management Planning allows all the uses and users of a river to be considered in an integrated way, while our multi-functional workforce enables us to realise substantial efficiency savings.

BYELAW MAKING POWERS

The Water Resources Act 1991 provides the NRA with byelaw making powers to regulate and manage navigations which are not subject to the control of another body.

In 1993 a jointly funded three year project recommended that the NRA should exercise these powers on the River Wye in order to secure the long term sustainable use of the river for a variety of recreational uses. Supported by a range of Local Authorities and statutory organisations the NRA advertised a speed limit byelaw in 1994 and sought confirmation of the byelaw from the Secretaries of State for Wales and the Environment. Since that time it has become apparent that attempts are being made to exercise antiquated legislation which could allow the construction of weirs and locks on the River Wye. Such action would fundamentally change the river and would impact upon all of the NRA's functions. It would eradicate the various pools, riffles and rapids which make this a resource of national importance for canoeists, fishermen and wildlife. The NRA is now considering the use of its more extensive powers to assume control as the navigation authority and repeal this now inappropriate legislation.

LIAISON AND COLLABORATION

During the year, the NRA and British Waterways continued to develop their joint working relationships. Unfortunately, the Broads Authority was unable to maintain its involvement at previous levels.

In June a highly successful seminar was held for all inland navigation authorities and was attended by more than 40 delegates. This was the first time such a seminar had been arranged and was commended by the Minister for the Environment, Robert Atkins MP. A similar event is planned for 1995.

At a joint NRA/BW boat show stand at Earls Court in January a new cashless payment system for navigation facilities was announced. The system is now being introduced on a replacement basis for existing coin-operated systems and could form the basis of an industry standard.

Resources and expertise were shared by NRA and BW on two research projects. The first consisted of market research to establish levels of safety awareness amongst users and to identify the best media for delivering safety messages. Alongside this work the support of the Royal Yachting Association (RYA) was gained for the development of a boat-handling course specifically designed for inland waterways. This non-mandatory course will be made available to the public by the RYA in 1995.

The second piece of research is being conducted in two phases and is examining factors influencing demand in boating. The first and preliminary phase was completed in the reporting period.

The development of training modules for Boat Safety Standards Examiners were progressed and the scheme will be phased-in as mandatory from 1st January 1997.

“ The NRA has a duty to promote the use of water and associated land for recreation. In carrying out this duty we seek to take a balanced view and our aim is to develop strategies which ensure that recreation developments are in harmony with other users and the environment.

Wherever possible, we endeavour to work with other organisations who have overlapping interests in our sphere of work. This collaborative approach provides opportunities for sharing expertise and research and most often produces a more cost-effective means of achieving our objectives. ”

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RECREATION

During the year the NRA built upon the results of its 1993 policy review and concentrated on the production of advice and guidance that would enhance the effectiveness and expertise of staff with recreation responsibilities. A foundation training course was piloted and has led to the development of a more extensive programme for 1995/96.

A review of NRA recreation sites was completed and enabled the production of a stand-alone report for the DoE Standing Committee for the Code of Practice on Conservation, Access and Recreation. The report was released in October 1994 and was widely circulated to NRA Advisory Committees, external organisations and interested members of the public.

At regional level, site management and input to planning and development control was afforded priority. With relatively limited resources and by utilising collaborative opportunities a number of notable projects were undertaken to promote recreation. However, reductions in grant-in-aid took away almost any opportunity for capital works and the NRA began to consider how future forecast reductions would impact upon statutory duties.

FACILITY MANAGEMENT

The NRA's database of recreation sites was used throughout the year at national and regional level. This information will be annually updated and in future years will guide policy development and the site management programme.

NRA sites have to accommodate many often competing interests including operational requirements, such as flood

storage, conservation and recreation. In order to provide a consistent and optimal mechanism for their development and management a *Site Management Methodology* was produced during the period covered by this report. This methodology will be introduced for use with a complimentary training programme in 1995.

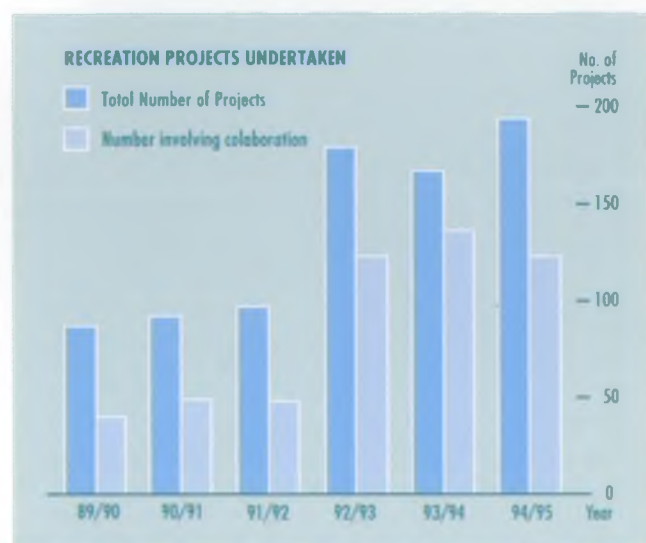
A *Facility Design* manual was produced and made available with introductory training for staff with recreation responsibilities. The manual contains details of the type of riverside and in-stream facilities that the NRA may provide on its sites as part of flood defence works or in collaboration with other organisations. It will also assist in the provision of responses to planning applications or requests for advice from clubs, land-owners or the general public. It provides a comprehensive and easy to use guide for design, costs, maintenance and usage. Now extensively used within the NRA there have also been many requests for the manual from external organisations.

The NRA's *Recreation Strategy* was published in 1993. During 1994, several regions expressed a desire to translate this into a regional strategy to reflect local circumstances and to enhance the link with Catchment Management Plans. Guidance notes for regional strategies were produced to ensure consistency of approach. They have been used by two regions to develop strategies and by one region as the basis of a collaborative development officer's post with the Sports Council.

PROMOTION AND ADVISORY SERVICES

The NRA continued to receive thousands of written and telephone enquiries about recreation on or near water. Many of these are adequately answered by NRA publications which cover topics such as where to canoe or fish and location of NRA sites. More detailed requests often require a specific response, meeting or site visit. This provision of information is valuable in encouraging recreational activity and enables the NRA to stress the importance of sustainable use.

Throughout the year the NRA provided support in the development of access agreements for canoeists in particular for the upper reaches of the River Wye. A review of the highly successful NRA leaflet for canoeists was undertaken and a new campaign to inform novice paddlers was designed. Aimed at the 15-25 age range a new leaflet, detachable card and poster were designed and, with the endorsement of the British Canoe Union(BCU) and the Welsh Canoe Association,



e NVIRON- MENTAL P O L I C Y

“ *The NRA is committed to the environmental principles of stewardship and sustainability. In addition to vigorously 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.* ”

will be launched in May 1995. This campaign provides information about access, environment and safety and is designed to encourage careful and considerate use of rivers.

LIAISON

The NRA maintained contact with governing bodies for sport, user-groups and statutory organisations. In addition to contributing to key seminars and conferences the NRA also responded to important consultations about the future role of the Sports Council and the distribution mechanisms for the National Lottery. The Countryside Recreation Network (CRN) was supported and provided a useful forum for the exchange of information, joint research and policy debate. In particular, the NRA through CRN began to investigate the implications of recent legislation on managing visitor safety in the countryside. This has led to the planning of a series of connected workshops and seminars involving overseas expertise in 1995.

Promoting recreation through partnership – *Making Waves project*

Improvements in water quality in the Tyne and Wear estuaries have been accompanied by an increase in watersport activities but national watersports bodies agree that they are still under-used. *Making Waves* has been launched to show how the potential for recreation on the estuaries can best be achieved, helping the environment at the same time. The strategy is an initiative of the Tyne and Wear Watersports Development Project which is funded by the NRA in partnership with the Sports Council and the Tyne and Wear Development Corporation. It has been endorsed by the five local authorities in Tyne and Wear and the two port authorities. All parties agree that coordinated strategic development and co-operation between local authorities, agencies and users of the rivers and associated lands is the best way to realise the recreational potential of the estuaries and to make the most of some of the region's greatest natural assets - its rivers, lakes and coastlines.

More than £170 million has been spent in the last 20 years on cleaning up the estuaries and neighbouring beaches. Salmon have returned to the rivers and the beaches have won blue flag awards. These improvements have been the precursor for a wide variety of water sports including sailing, water-skiing, diving and angling. As well as increasing the number of participants in these sports the strategy aims to develop more informal recreation. Sightseers, anglers, walkers and cyclists already use footpaths and cycleways that follow the riverbanks through reclaimed and landscaped amenity areas. Further inland, those with an interest in natural history and conservation can enjoy country parks, wildlife and mature conservation areas.

Our internal Environmental Policy was introduced in 1992. In 1994/95, we have continued the phased implementation of environmental good practice throughout the organisation, focusing our efforts on three areas:

MINIMISATION OF RESOURCE USE AND WASTE

- Following energy audits of NRA buildings, savings of the order of £300,000 per annum have been identified from efficiency measures and tariff adjustments.
- Action on transport including a switch to diesel - 90% of the badged fleet and 68% of leased vehicles are now diesel driven - has improved overall vehicle efficiency and has cut annual fuel costs by approximately £150,000.
- The use of bicycles is being trialed for our field work in inspection and enforcement programmes.
- An Efficient Driver project aimed at raising driver awareness, improving driving techniques, and reducing accidents, losses and fuel consumption has commenced and is projected to realise annual savings of £450,000.
- The metering and monitoring of water consumption has resulted in reduced losses from leakage - by as much as 30% in some locations.
- Paper use has been reduced by 8%.
- A national contract has been let for the supply of paper containing 100% post consumer waste and totally chlorine free. Last year 80% of paper purchased was from recycled sources; 75% of paper purchased was sent for recycling.

MINIMISATION OR ELIMINATION OF HARMFUL PRACTICES

- We have completely ceased using ozone depleting substances. 4 regions have removed halon drench systems from their buildings; all regions have removed halon extinguishers.
- A toxic substances policy is being integrated into our COSHH procedures.
- A policy on use of hardwoods in structures has been produced.

ESTABLISHMENT OF SYSTEMS AND PROCEDURES

- Following pollution risk audits, all locations are now operating to a pollution prevention checklist that aims at best environmental practice.
- We have developed our own environmental auditing procedures and completed full environmental audits at two locations.
- Significant progress has been made in improving the quality and quantity of environmental performance data.
- We have raised employee awareness through newsletters and the introduction of staff environmental circles; a video and briefing pack were produced to support Efficient Driver training.
- We have produced a grounds maintenance specification that is being reviewed as part of a conservation strategy.
- An environmental procurement policy has been implemented and training given to procurement officers. The production of Environmental Guidelines, covering most of the products purchased by the NRA, specify lower environmental impacts.
- Our new project management guidelines integrate environmental policy into management decision-making and further promote best environmental practice.

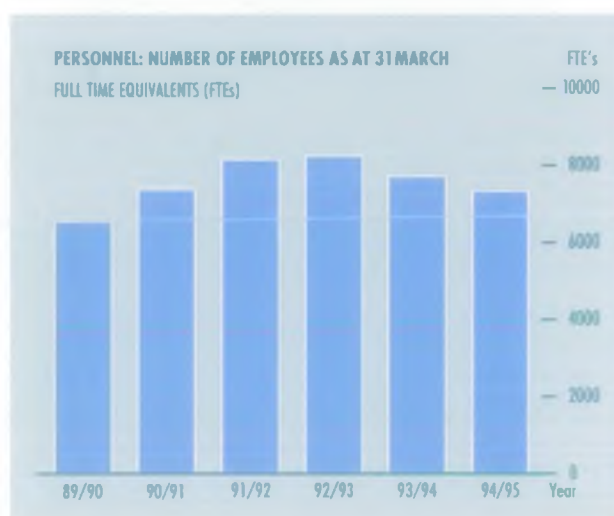
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USINESS
SUPPORT
SERVICES

PERSONNEL

In its 1993/94 Corporate Plan, the Authority set out an efficiency and savings programme totalling £200 million over a four year period.

Total salaries and wages costs represent about one-third of our total operating budget. During 1994/95 we have continued to carefully manage total staff numbers. After peaking in 1992/93, employee numbers, as measured in terms of full time equivalents (FTEs), have fallen over the last two years. Regional reorganisation and mergers, the creation of national centres and services, market testing and the take-up of voluntary severance have enabled us to reduce our numbers without the need for compulsory redundancies.



Work has continued to develop areas of policy and activity to compliment the on-going planned changes within the Authority.

In parallel training and guidance in best management practice has been prepared to facilitate closer relationships between line managers and their staff.

Retraining and outplacement arrangements are being continuously refined and improved to provide the Authority with the most flexible options in its internal rationalisation and reorganisation activities.

Employee relations

Agreement was reached with Unison on the introduction of revised grading structures and performance-related pay based on job evaluation. Staff assimilated to the new salary structures on 1 July 1994. Agreement was also reached on a salary increase

within Government Public Sector Pay Policy limits.

Over 1,000 appeals against initial grading were heard by local panels and quality assured by a national panel during the period October 1994 to March 1995. As a result, some 250 posts were upgraded. Performance objectives for 1995 appraisals were set around July 1994. Line managers were fully trained in performance rating. The resultant ratings will be quality assured at national level prior to the first performance related pay payments in July 1995. Discussions have been underway with Unison since early 1995 on mechanisms for 1995 pay determination.

In mid-1994, agreement was also reached with the trade unions representing manual and craft employees on an increase in wage and allowance rates in line with Government policy. Additionally, negotiations on changing terms and conditions for the in-house workforce to achieve improvements in efficiency and better value for money continued throughout the year. The NRA's proposals were approved by the Department of the Environment and Treasury at the end of 1994. Since then detailed discussions with the trade unions and contractor managers have been underway.

Consultation arrangements for the 1994/5 and 1995/6 Market Testing Programmes were finalised and are now in place.

Training and development

Following the successful Ashridge programme for senior managers, a series of courses was organised for some 450 middle managers. This programme was intended to give further impetus to the development of an appropriate organisation culture, emphasising the role of managers in managing the performance of their teams and leading effective change. The courses also provided the opportunity to develop the skills which are critical in these areas. This programme, run at Sundridge Park, has been highly effective and has in its turn stimulated not only individual development but a variety of follow-up actions in local teams.

The *Certificate in Management* programme launched in 1993 with over 100 delegates, was well received and resulted in a 90% success rate, well above the norm for distance learning programmes. It will be offered each year, together with a Diploma level course which is currently being piloted.

Recognising the significance for the Authority of professional and technical excellence, the Steering Group approved a broad programme which cost nearly £500,000. This programme supported priorities in most functions,

including training in sampling and sample programme design, environmental appraisal and planning/public enquiries.

In its first year, the National Training Service delivered training at a cost of some £1.2 million, about 40% of the total budget. The benefits of planning training to meet corporate priorities and to deliver training of a consistently high quality have been demonstrated and the policy will be developed further in the coming year.

Health and Safety

Health and Safety continues to be a successful feature of the Authority's operational activities. The revised *H&S Policy Manual*, completed by the National Safety Service, was issued and the underlying principles of a user-friendly, easy-to-read document was well received by line managers and employees alike. The role of safety coordinators continues to have a major impact at operational level and reflects well on the training carried out during the previous year.

The introduction of the *Certificate in Managing Safely* distance learning package, through a pilot group, has been very successful with 22 delegates completing the course and receiving their certificate. A further 100 delegates have enrolled on the course and it is hoped that all line managers will complete this important certificate course in the future. The NRA have been recognised as an accredited examination centre for the course.

The main thrust of health and safety training during the year has been on the preparation for the *Construction (Design and Management) Regulations 1994* which will have a major impact on all areas of NRA operations. The National Safety Service have designed a number of courses tailored to suit individual functional needs and these will be delivered during 1995/96 in support of the initial awareness training carried out during this year.

Although accident rates have increased slightly this year the NRA still out-performed comparable organisations for reportable accidents and have received a fourth successive safety award from the British Safety Council. The Annual Safety Representatives Forum was held in the Midlands, where nominated regional safety representatives were awarded Certificates of Commendation by the Chief Executive for outstanding contribution to health and safety.

The Health and Safety Advisory Group continued to provide a quality advisory service to the management teams.

The NRA are leading the effort in the preparation of the Health and Safety Policy for the Environment Agency and will be using the successful formula developed for current health and safety policy.

Equal Opportunities

The Authority has continuously reviewed all its equal opportunities policies and practices including enhancing its ability to monitor the ethnic origin of job applicants.

Pensions

The Authority has continued its comprehensive efforts to support those employees leaving the organisation and who are of pensionable age. Employees of the Authority have pension entitlements from a considerable range of sources and maximising these entitlements is always a complicated matter.

Work was also undertaken to prepare for the *Local Government Pension Scheme Regulations* introduced in early 1995 to consolidate previous *Pension Scheme Regulations*. The new regulations brought about increased death-in-service benefits for all employees and further provisions for equal entitlements between male and female employees.

Market Testing of the Personnel Function

Under the National Market Testing Programme an efficiency review was conducted of the personnel function nationally. This has resulted in savings and efficiencies across the regions and Head Office and the function being remodelled to operate at a more strategic level.

RESEARCH AND DEVELOPMENT

Introduction

The main purpose of our R&D programme is to make the NRA more efficient and effective by providing innovative solutions and useable outputs to help NRA staff in their work. 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.

Actions were put in place in 1994/95 to put R&D onto a formal National Service footing. This will ensure that the service is as flexible and responsive to the requirements of the customer as possible and make it more effective.

Environment Agency Preparation

Given the inherent lead-time involved in R&D, work on the harmonisation of the R&D programmes of the NRA, HMIP, and DoE's Waste Technical and Contaminated Land Liabilities Divisions, was seen as a key priority. The R&D Working Group of the EAAC Policy Sub-Committee, has produced a number of outputs in response to the timetable set down, including:

- a database of all environment-related R&D funded in the UK;
- options for the future management of R&D in the Agency; and
- a register of on-going projects that will be inherited by the Agency.

The R&D Working Group have also ensured that in areas of mutual interest, collaborative projects are established, thereby reducing any areas of duplication. To date these include a pilot study of toxicity based consents, waste minimisation, and environmental toolkits.

Key Achievements

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 work, the vast majority of which are being implemented without the need for additional resources
- completed and implemented the results of independent reviews of four areas of the R&D programme
- implemented improved arrangements for disseminating information to the public, including all outputs resting with the British Lending Library
- published seven major reports and the Annual R&D Review – 1994
- saved the NRA over £1 million through collaborative funding.

Partnerships and Collaboration

The NRA has established Memoranda of Agreement with the Scotland and Northern Ireland Forum for Environmental Research, and the Natural Environment Research Council in 1994/95. These agreements will enable the NRA to work more closely with these key organisations, and ensure that value for money is obtained through collaborative programmes in areas of mutual interest.

Key projects and outputs

Of the 100 outputs produced in 1994/95, a number were published to aid a wider, external dissemination.

The work summarised in the report on *Status of Rare Fish* was carried out by NERC's Institute of Freshwater Ecology, and provided essential information for the management and protection of rare fish species.

The report entitled *Demand for Irrigation Water*, presented the principal findings of research carried out for the NRA by Silsoe College. It provided an assessment of the likely pressures on water resources given a number of scenarios of demand from the agricultural sector.

Of the new 60 projects started in 1994/95, important work was commenced on improving the efficiency of water quality monitoring and is being carried out in collaboration with the Po River Authority in Italy.

Work on producing a manual of groundwater tracing techniques has also been started in collaboration with the British Geological Survey. This manual will inform external organisations as well as NRA staff.

The development of practical methods for tracking fish movements has been the subject of another study in association with MAFF. This work will look to develop new techniques to assist in stock assessments.

The NRA is keen to publicise its R&D programme and outputs. *The Annual R&D Review – 1994* provides details of projects in the 1994/95 programme as well as summarising the key outputs from the 1993/94 programme. A *List of R&D Outputs* covering the period September 1989 to September 1994 was also published giving details of all outputs produced through our R&D programme and their availability.

FINANCE

Financial Management

This year much effort has been put into raising the profile of financial management generally throughout the Authority. This has included the running of a financial awareness training programme nationally, as well as the promotion of a number of internal deregulation initiatives, in particular, the revision of the Authority's Scheme of Delegation rules and Project Management Guidelines. The emphasis has been on strengthening the principles of accountability and empowerment, eliminating unnecessary bureaucracy and thereby enhancing financial control.

A great deal of work has also been undertaken in preparation for the successful pilot implementation of a National Integrated Accounting System in South Western and Southern regions and in Head Office from 1 April 1995. Effective financial support to the Authority's market testing initiatives has continued and improvements have been made to the accuracy of our financial forecasting. Attention has also been focused on reducing trade debtors, as well as verifying fixed assets prior to the creation of the new Agency.

We have been pleased to provide practical advice and support to the Environment Agency Advisory Committee.

Procurement

The development of a professional procurement function continues to be a high priority. The value of national contracts for recurrent supplies and services increased from £25 million to over £45 million during the year. Savings based on contract period have exceeded £2.7 million. Increased competition for NRA contracts has been achieved through improved planning and the consistent application of EC procurement legislation. Training provision has again been at a high level with concentration on the development of commercial awareness amongst core function teams.

INFORMATION SYSTEMS

The creation of a National IS organisation has produced efficiency savings and staff reductions of 10% for the current year with a further 10% reduction projected for 1995/96. These savings have contributed to a reduction in the support costs for existing systems. This is illustrated by the introduction of regional service level agreements (SLAs) which have been developed in 1994/95 and which show savings of over £2.5m in 1995/96.

Saving made on the support of existing legacy systems have been focused on the development of National Priority Projects. These projects have been integrated with the overall business priorities, to achieve not only IS efficiencies but also to deliver business benefits. The projects – Integrated Accounting System, Personnel and Payroll and Water Archive and Monitoring system – have completed the full EC procurement process and have received full approval for implementation. A pilot implementation of the IAS project has been completed in the South Western Region.

With the completion of the IT Infrastructure procurement project we have national contracts that cover the whole range of IT equipment and services from PCs to UNIX Computers, Local Area Networks to Wide Area Network communications, saving on both the purchase price of equipment and the cost of procuring equipment. These contracts are being used to provide the infrastructure to implement the National Priority Projects.

The introduction of national projects and IT infrastructure has reduced our legacy of differing IT equipment and systems supported within the Authority and further reduced our dependency on Water Companies' support contracts.

INFORMATION CENTRE

The Information Centre has continued to develop and expand its computerised catalogue of publications held by the NRA, as well as extending its range of links with external bodies and information sources. During the year the centre was subject to a national efficiency review of Library and Information Services. Provision of improved management and access to publications has been agreed in those regions without library services. It was also agreed that the centre will provide an extended national service to staff in all regions as well as Head Office and to offer public access to the centre by appointment. Initial planning work for the Agency was carried out with our future partners and presented to the Environment Agency Advisory Committee. This aims to build on rationalisation of current NRA services.

LEGAL SERVICES AND COMMITTEE SERVICES

The Authority's rigorous enforcement of pollution control continued, with some 348 prosecutions for water quality offences in 1994/95. 91% of prosecutions undertaken were successful.

A significant input was made into the preparations for the Environment Agency, particularly in relation to the proposed legislation. Legal support was provided for the River Restoration Project, a joint initiative funded by EC LIFE which involves the NRA working with Local Authorities, the National Trust, English Nature and the Countryside Commission. A suite of model agreements was produced for future similar ventures. Other substantive roles included the establishment and management of the externalised debt recovery service and involvement in developing a pro-active

policy for recovering costs in pollution incidents.

A national efficiency review of Committee Services took place resulting in direct cost savings of 12% for service provision. At Head Office, general Committees' support continued to be provided to the Board, its Committees and the Executive Group. The guidelines on document security and confidentiality were reviewed and re-issued. Information was provided to those working on the Environment Bill in preparation for the Environment Agency, including operating procedures for Statutory Committees and representation on Regional Committees. Regional Advisory Committee Chairmen were appointed for a further term of office up to the creation of the Environment Agency.

Estates Management

A national accommodation plan and programme were produced and incorporated into the corporate planning process. Office accommodation and occupancy data is being used in assessing the accommodation requirements for the Environment Agency.

The standards of estates services delivery were reviewed, resulting in improved guidelines for property appraisals and technical processes.

The Market Testing programme has evolved to the point where the provider activities of the Estates function will be exposed to competition with the retention in-house of a small intelligent client base.

The Authority's fixed asset registers have been reconciled with the regional property records systems. This has involved the valuation of the organisation's land holdings to meet financial management requirements.

The Estates Department continued with its activities in obtaining possession of land for the Authority's substantial capital and revenue programmes, including the valuation and payment of compensation to affected landowners and the acquisition of property required for capital schemes. A review of land holdings was carried out in order to identify used and under-utilised land for sale or estates management.

NATIONAL LABORATORY SERVICE

In 1993/94 the NRA laboratory network was rationalised to form a National Laboratory Service (NLS). By the end of 1994/95 over £4 million in total had been saved consequent of economies of scale producing a 12% increase in efficiency despite a lower than expected workload. Further

savings are anticipated for 1995/96.

Following a difficult start, chemical analytical services to client regions have steadily improved. Service level agreements are being rationalised to give common quality standards and reporting limits for all 8 regions.

The excellent support to Water Quality in handling pollution incidents was illustrated following a major incident in April 1994 when pollution to the River Severn in Worcestershire resulted in the precautionary closure of public water supply intakes. NLS analysts quickly and effectively identified the offending chemicals, thus contributing significantly to identifying the source of the pollution and monitoring its effects.

Capital investment, particularly in organic analysis, continues as the NLS strives to improve efficiency and the reliability of data provided.

A feasibility study is considering the provision of a new National Laboratory Information Management System essential to future improvements in the service provided by the NLS.

INTERNAL AUDIT

Internal Audit reviews all of the NRA's activities and recommends improvements to controls aimed at helping the Authority to manage and reduce its business risks.

In 1994/95, the department produced approximately 60 reports including pension fund management, market testing, abstraction licence determination, Customer Charter and corporate planning. Savings of over £1 million per annum were identified.

During the year Internal Audit was market tested against external competition. The in-house team won. Whilst the process resulted in some reduction in the department's outputs it also achieved some significant savings and quality improvements.

The NRA is committed to strong internal audit and the impact largely reflects the support of senior managers and the Board. The Authority's Audit Committee, until recently under the chairmanship of Lord Gregson and now chaired by Mrs R. Blomfield-Smith, monitors the performance of Internal Audit. It also ensures action is taken whenever improvements are necessary.

f INANCIAL STATEMENTS

FOR THE YEAR ENDED 31 MARCH 1995

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I. FOREWORD

HISTORY AND STATUTORY BACKGROUND OF THE NATIONAL RIVERS AUTHORITY (NRA)

The Authority is a non-departmental public body having statutory powers and duties relating to flood defence, water resources, pollution control, fisheries, recreation, conservation and navigation. It took up its full statutory duties on 1 September 1989 under the provisions of the Water Act 1989 which was superseded by the Water Resources Act 1991 and other consolidating legislation.

The Authority's sponsor in government is the Department of the Environment which has primary responsibility for administering the controls over the Authority under the Financial Memorandum. The Ministry of Agriculture, Fisheries and Food (MAFF) has specific responsibility for flood defence and fisheries in England and so the Authority deals directly with the Ministry on policy issues relating to those functions. The Authority also has direct dealings with the Welsh Office on matters associated with its functions as they affect Wales.

Flood defence activities are financed primarily by levies and grants from MAFF and the Welsh Office towards the costs of capital projects. Expenditure on the water resources function is funded entirely through charges to customers. The Authority's remaining functions, relating to pollution control, fisheries, recreation, conservation and navigation, receive their funding partly through fees and charges and partly through grant-in-aid from the Department of the Environment. Grant-in-aid allocated to the Authority is included in Class VII, Vote 5 of the parliamentary supply estimates.

RESULTS

The Authority had a deficit of £19.7m for the year. There were transfers of £21.5m to the capital reserve and £16.4m from the special asset replacement fund (see note 10), leading to a reduction in the balance on the income and expenditure account of £24.8m. Financial information on a receipts and payments basis is to be found in Section IX.

The results were again significantly affected by the cost of voluntary severance. The aggregate for severance payments to ex-employees and accruals for future liabilities for added years' pension payments was £9.9m (see also note 3).

The Authority also introduced a job evaluation scheme for staff involving revised salary and grading arrangements with a performance related pay component. As a consequence payments totalling £2.9m were made to staff to compensate them for those revised arrangements and associated changes

to conditions of service. Compensation payments were funded entirely from grant-in-aid.

REVIEW OF ACTIVITIES

Water Resources

The Authority is required to ensure that, taking one year with another, income from abstraction charges equals expenditure (including current cost depreciation on water resources assets, a rate of return of 2% on the net current cost value of water resources assets transferred to it on 1 September 1989 and 8% on such assets acquired since then). Cash surpluses at the year end can be carried forward only to the extent that they cover net repayments due to abstractors, short term creditors and accrued liabilities. All other cash surpluses must be offset against the grant-in-aid requirements of the general pollution control, fisheries, navigation, recreation and conservation functions.

Expenditure exceeded income from abstraction charges in the year by £12.8m. Net accumulated surpluses consequently fell from £13.1m to £0.3m over the period (see Section IX(c) of the Financial Statements).

Water resources closing cash in hand totalled £6.7m. An amount of £5.1m was required to cover creditors, accruals, and repayments due to abstractors. A cash surplus of £1.6m (see note 8) otherwise eligible to be offset against grant-in-aid remained unutilised at the end of the year. Under normal circumstances the maximum amount available for carry-forward would have been £1.4m (see paragraph below). However the Authority has received dispensation to carry forward the whole of the cash surplus of £1.6m, on the basis that the additional funds are used to facilitate changes to its car allowances scheme.

Grant-aided Functions

The principal financial duty for each of the grant-aided functions is to balance receipts (including grant-in-aid) with payments in each financial year. Any cash surpluses relating to such a function to be carried forward from one financial year to the next must not exceed 2% of the original grant-in-aid for that function.

As regards pollution control specifically, the Authority must also ensure that, taking one year with another, income from applicants for and holders of discharge consents equals expenditure (including current cost depreciation on relevant assets) incurred in connection with the granting of consents for direct discharges of effluent to controlled waters.

Any cash surpluses arising on monitoring and consenting activities, after allowing for net repayments to charge-payers, short term creditors and accrued liabilities, must be offset against grant-in-aid requirements.

Financial performance on grant-aided functions has to be measured in cash accounting terms. The following table, derived from the analysis of receipts and payments, summarises the position on grant-aided functions:-

	Payments	Operating Receipts	Grant-in-aid Requirement
	£m	£m	£m
Pollution control	84.6	46.5	38.1
Fisheries	23.6	13.6	10.0
Recreation & conservation	7.9	0.6	7.3
Navigation	6.3	3.3	3.0
Sub total	122.4	64.0	58.4
Job evaluation	2.9	—	2.9
Unfunded pensions	12.0	—	12.0
	137.3	64.0	73.3

Income from applicants for and holders of discharge consents exceeded expenditure on related pollution control activities by £1.4m. This in-year surplus eliminated the accumulated deficit of £0.8m brought forward from the previous year and left a sum of £0.6m returnable to charge-payers through future adjustments to tariffs.

Flood Defence

The Authority is required to break even, taking one year with another, on income and expenditure. It must also extinguish, within five years from 1 April 1992, cash reserves transferred to it on 1 September 1989 other than those representing the balance on the income and expenditure account.

The consolidated flood defence account comprises the individual accounts of Flood Defence Committees, through which the Authority, under Section 106 of the Water Resources Act 1991, arranges to carry out its flood defence functions.

The Authority received capital grants of £34.9m from MAFF and £0.4m from the Welsh Office.

Fixed Assets

Expenditure of £56.5m was incurred on tangible fixed assets in the year. Grants, contributions and depreciation

together provided funding of £35.0m. The remaining financing of £21.5m was transferred from the accumulated surplus on the income and expenditure account.

During the year, the Authority completed a reconciliation between its fixed asset registers and its estates records of land and buildings. The reconciliation revealed that a number of land holdings did not appear in fixed asset registers and were not therefore included in the balance sheet. The discrepancies between fixed asset registers and estates records had arisen because of the varying recording systems and accounting practices of predecessor authorities. The financial effect of the reconciliation has been to increase asset values by £6.8m; further details are given in notes 6 and 10.

The combination of asset purchases, depreciation in the year and the fixed asset register reconciliation has raised the value of tangible fixed assets in the balance sheet by £31.1m from the opening position.

Pensions

The Authority is the statutory administering body for the pensions fund for new employees and transferees from the former water authorities (the NRA Pension Fund) and also for a remnant fund (the New Main and New Second Fund) which provides benefits to pensioners of the Foundation for Water Research, WRc plc, Water Services Association of England and Wales, Water Training international and the former British Water International. The Funds are defined benefit schemes administered in accordance with local government superannuation scheme regulations.

The New Main and Second Fund (known as the "Closed Fund") receives no contributions from the Authority and the Secretary of State for the Environment has a duty under Section 173(3) of the Water Act 1989 to ensure that the Fund can always meet its liabilities, including future indexation awards. Separate accounts are maintained for the NRA Pension Fund and the New Main and Second Fund, respectively.

Research and Development

The furtherance of research is specified as one of the Authority's duties in the Water Resources Act 1991. The aims of the research and development programme are to improve the Authority's efficiency in the exercise of its functions and to provide new knowledge and techniques which increase its ability to discharge its duties. The programme covers all core functions but pollution control attracts the largest proportion of financial resources. Expenditure in the year was £6.1m.

Future Developments

The 1995/96 Corporate Plan sets out the Authority's mission, aims and future targets for its core functions and support services. The Authority's top priority will be to continue to deliver all of its statutory functions through integrated catchment management whilst achieving significant efficiency savings. Maximum expenditure will, wherever possible, be concentrated on delivering water quality improvements that will benefit other functions. The Authority supports the proposal for the new Environment Agency and will continue to actively assist and provide advice to the Government and the Environment Agency Advisory Committee in the period leading up to its creation. Plans to complete the implementation of new financial, personnel and payroll and other management information systems by April 1996 will help the Agency deliver better value for money.

Events since the End of the Financial Year

There have been no events since the end of the financial year which impact materially on these financial statements.



CHAIRMAN

Board and Committee Members

Particulars of Board Members are given in Appendix 1 of the report, and Committee Members in Appendix 2.

Disabled Persons

If any employee becomes disabled, every effort is made to allow that person to continue in the Authority's employment, and to offer an alternative job and provide re-training where necessary.

The Authority considers applications for employment from individuals with disabilities on the same basis as other applicants, having regard to the nature of the disabilities and vacant posts.

Employee Involvement

The Authority has national and regional joint committees for consultation and negotiation with industrial and non-industrial employees. The committees are also the means of keeping employees' representatives informed of developments affecting employment with the Authority.



CHIEF EXECUTIVE AND ACCOUNTING OFFICER
6th July 1995

II. STATEMENTS OF RESPONSIBILITIES OF BOARD MEMBERS AND ACCOUNTING OFFICER

The Board is required to prepare financial statements in accordance with the Accounts Direction (see Section X).

The Board is responsible for the strategic direction and policies of the Authority, together with its proper and effective management. Members are responsible, inter alia, for the stewardship of public funds and are trustees of the assets. They take particular care to ensure that the efficiency and effectiveness of the Authority's activities, including its administration, are regularly monitored and, where possible, improved.

The Accounting Officer is responsible for the propriety and regularity of all the Authority's financial transactions, for the keeping of proper accounts, for prudent and economical administration, for the avoidance of waste and extravagance, and for the efficient and effective use of all the Authority's resources. In particular, the Accounting Officer must ensure that proper financial procedures are followed and accounting

records maintained, that public funds are properly and well managed, and that the Authority's assets are adequately controlled and safeguarded.

All Board Members have received copies of "Responsibilities of Board Members of Non-Departmental Public Bodies" (a note by the Department of the Environment), which expands the above paragraphs.



CHIEF EXECUTIVE AND ACCOUNTING OFFICER
6th July 1995

III. AUDITORS' REPORT

Report of the Auditors to the Board of the National Rivers Authority, the Secretary of State for the Environment, the Secretary of State for Wales and the Minister of Agriculture, Fisheries and Food.

We have audited the financial statements on pages 71 to 95

Respective Responsibilities of Board Members and Auditors

As described in Section II, the Board is responsible for the preparation of financial statements. It is our responsibility to form an independent opinion, based on our audit, on those statements and to report our opinion to you.

Basis of Opinion

We conducted our audit in accordance with Auditing Standards issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgements made by the Accounting Officer in the preparation of the financial statements, and of whether the accounting policies are appropriate to the Authority's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or other irregularity or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements.

Opinion

In our opinion the financial statements give a true and fair view of the state of affairs of the National Rivers Authority at 31 March 1995 and of its deficit and cash flows for the year then ended and have been properly prepared in accordance with Section 121 (2) of the Water Resources Act 1991 and the Accounts Direction dated 7 July 1994 given thereunder, as amended.



Coopers & Lybrand
Chartered Accountants and Registered Auditors
Bristol
6th July 1995

IV. STATEMENT OF ACCOUNTING POLICIES

(a) Basis of Accounting

The Financial Statements have been prepared in accordance with the Direction on the Annual Accounts made by the Secretary of State for the Environment, the Secretary of State for Wales and the Minister of Agriculture, Fisheries and Food under Section 121(2) of the Water Resources Act 1991. A copy of the Direction is included in Section X below.

(b) Accounting Conventions

The financial statements are prepared using the historical cost convention.

(c) Income

Income represents total income, exclusive of VAT, receivable for functions undertaken and grant-in-aid received from the Department of the Environment (DoE). Grant-in-aid is received from the DoE in respect of capital and revenue expenditure on pollution control, fisheries, recreation, conservation and navigation activities.

(d) Capital Grants and Contributions

Grants that relate to specific capital expenditure are treated as deferred income which is then credited to the income and expenditure account over the asset's useful life.

(e) Special Asset Replacement Fund

The Fund was originally set aside against the future need for major capital works on the Thames Barrier, but may now be used for other capital works in the Thames Region and is to be extinguished no later than March 1997. Transfers to the Fund from the income and expenditure account represent interest receivable on reserve balances and transfers are made from the Fund to meet capital costs incurred.

(f) Capital Reserve

Tangible fixed assets were transferred to the Authority at vesting free of debt. The written down value of such assets in the opening balance sheet was recorded in a capital reserve. Annual transfers to the reserve since vesting represent the excess of capital expenditure net of disposals over historical cost depreciation.

(g) Intangible Fixed Assets

Expenditure on intangible fixed assets is charged to the income and expenditure account in the year in which it is incurred. Intangible fixed assets are defined as river bank,

channel and related works which are of no realisable value to the Authority or works on structures and properties belonging to third parties where the ownership of the works undertaken does not vest in the Authority.

(h) Tangible Fixed Assets

Pre vesting assets are included in the financial statements at the values at which they were transferred to the Authority as at 1 April 1989 less depreciation charged in subsequent years. Fixed assets acquired since the opening balance sheet are stated at cost less accumulated depreciation. The cost of tangible fixed assets is their purchase cost, together with any incidental expenses of acquisition. Depreciation is calculated so as to write off the cost of tangible fixed assets on a straight line basis over the expected useful economic lives of the assets concerned. The principal economic lives used for this purpose are:

Buildings 10-60 years
Vehicles and mobile plant 3-20 years
Operational structures 20-100 years
Computers and equipment 5-10 years
Freehold land is not depreciated

(i) Water Resources Account

Surpluses which accumulate on regional water resources accounts (see Section IX(c) of the Financial Statements) are treated as liabilities for sums repayable to abstractors. These are credited to the income and expenditure account as water resources costs exceed income from charges to abstractors through adjustments to tariffs. Deficits are treated as amounts due from abstractors and are debited to the income and expenditure account as income from charges exceeds costs.

(j) Pollution Control Account

The Authority has to ensure that charges for discharge consent activities cover costs. The pollution control account is effectively divided into two parts: one relates to activities associated with the monitoring of consents; the other concerns general environmental control. A surplus on the part of the account relating to the administration and control of consents is treated as a liability for a sum repayable to consent holders. It is credited to the pollution control account as costs exceed income from charges to consent holders through adjustments to tariffs. A deficit is treated as an amount due

from consent holders and is debited to the account as income from charges exceeds expenditure.

(k) Leases

Costs in respect of operating leases are charged on a straight line basis, over the lease term.

Finance leases are treated as if the asset had been purchased outright. The relevant assets are included in fixed assets and the capital element of the leasing commitments is shown as an obligation under finance leases. Depreciation on the relevant assets is charged to the income and expenditure account on a straight line basis to write the assets off over their expected useful lives. Finance lease payments are treated as consisting of capital and interest elements, and the interest is charged to the income and expenditure account using the annuity method. All obligations under finance leases were inherited from the predecessor water authorities.

(l) Research and Development

Research and development expenditure is charged to the income and expenditure account in the year in which it is incurred.

(m) Pensions

The Authority makes regular contributions to the NRA Pension Fund (known as the "Active Fund") only. They are charged to the income and expenditure account and are set following formal actuarial valuation of the Fund at a level sufficient to ensure the scheme is fully funded and taking account of the expected pension costs over the service lives of the employees. Liabilities for enhancements to employees' pension arrangements under the Authority's voluntary severance scheme are accounted for in the year in which applications for severance are approved.

The Authority also effects payment of certain unfunded pensions to former water industry employees on behalf of the Government. Such pensions payments are met entirely from grant-in-aid.

V. INCOME AND EXPENDITURE ACCOUNT *for the year ended 31 March 1995*

	See note	1994-95 Total £m	1993-94 Total £m	1994-95 Service Accounts (See Note 17) £m	1993-94 Service Accounts £m	1994-95 Flood Defence (See Note 18) £m	1993-94 Flood Defence £m
Income							
Income from activities		298.0	319.7	142.5	139.6	155.5	180.1
Government grant-in-aid		55.7	48.6	55.7	48.6	—	—
Capital grants and contributions		38.3	31.9	0.2	0.3	38.1	31.6
Sale of assets		2.4	1.3	0.7	0.2	1.7	1.1
		394.4	401.5	199.1	188.7	195.3	212.8
Expenditure							
Staff costs	2,3	167.8	169.1	96.1	94.2	71.7	74.9
Depreciation and expenditure on intangible fixed assets		119.1	104.4	17.6	16.2	101.5	88.2
Other operating costs		136.5	131.0	80.1	78.2	56.4	52.8
		423.4	404.5	193.8	188.6	229.6	215.9
Operating (deficit)/surplus	4	(29.0)	(3.0)	5.3	0.1	(34.3)	(3.1)
Interest receivable	5	9.3	11.4	1.9	2.4	7.4	9.0
(Deficit)/surplus for year		(19.7)	8.4	7.2	2.5	(26.9)	5.9
Transfers (to)/from reserves							
Capital reserve	10(a)	(21.5)	(16.1)	(11.5)	(6.8)	(10.0)	(9.3)
Special asset replacement fund	10(b)	16.4	0.5	—	—	16.4	0.5
		(24.8)	(7.2)	(4.3)	(4.3)	(20.5)	(2.9)
Balance brought forward		48.6	55.8	0.3	4.6	48.3	51.2
Balance carried forward		23.8	48.6	(4.0)	0.3	27.8	48.3

Note:

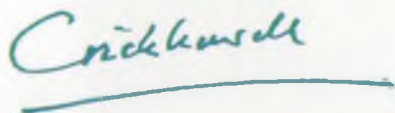
All of the Authority's income and deficit for the year were derived from continuing activities.

The Authority had no recognised gains and losses other than those included in the income and expenditure account, and therefore no separate statement of total recognised gains and losses has been prepared.

VI. BALANCE SHEET *as at 31 March 1995*

	<i>See note</i>	1994-95	1993-94	1994-95	1993-94	1994-95	1993-94
		Total	Total	Service	Service	Flood	Flood
		£m	£m	Accounts	Accounts	Defence	Defence
				£m	£m	£m	£m
Fixed assets							
Tangible assets	6	533.5	502.4	215.0	203.1	318.5	299.3
Current assets							
Stocks and work in progress		2.4	2.2	0.6	0.3	1.8	1.9
Debtors	7	37.2	34.4	14.0	14.8	23.2	19.6
Cash at bank and in hand		84.2	142.2	7.7	27.3	76.5	114.9
Total current assets		123.8	178.8	22.3	42.4	101.5	136.4
Creditors: amounts falling due within one year	8	61.1	78.3	21.7	39.1	39.4	39.2
Net current assets		62.7	100.5	0.6	3.3	62.1	97.2
Total assets less current liabilities		596.2	602.9	215.6	206.4	380.6	396.5
Financed by							
Creditors: amounts falling due after more than one year	8	10.7	7.3	4.6	3.0	6.1	4.3
Deferred grants and contributions	9	31.5	28.7	4.4	4.5	27.1	24.2
Reserves							
Capital reserve	10(a)	502.0	473.7	210.6	198.6	291.4	275.1
Income and expenditure account		23.8	48.6	(4.0)	0.3	27.8	48.3
Special asset replacement fund	10(b)	28.2	44.6	—	—	28.2	44.6
		596.2	602.9	215.6	206.4	380.6	396.5

The financial statements on pages 71 to 95 were approved by the Board on 6 July 1995 and were signed on its behalf by:



CHAIRMAN



CHIEF EXECUTIVE AND ACCOUNTING OFFICER

VII. CASH FLOW STATEMENT *for the year ended 31 March 1995*

	<i>See note</i>	1994-95		1993-94		1994-95		1993-94		1994-95		1993-94	
		Total		Total		Service Accounts		Service Accounts		Flood Defence		Flood Defence	
		£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Operating Activities													
Grant-in-aid received			60.3		61.3		60.3		61.3		—		—
Cash received from customers			280.3		316.6		128.1		137.5		152.2		179.1
Cash payments to suppliers			(126.0)		(123.4)		(72.6)		(74.1)		(53.4)		(49.3)
Cash paid to and on behalf of employees			(167.8)		(169.2)		(96.1)		(94.2)		(71.7)		(75.0)
Other cash payments			(12.0)		(11.7)		(12.0)		(11.7)		—		—
Net cash inflow from operating activities	<i>19(a)</i>		34.8		73.6		7.7		18.8		27.1		54.8
Net cash inflow from returns on investments-interest received			9.3		11.4		1.9		2.4		7.4		9.0
Investing Activities													
Payments to acquire tangible fixed assets			(56.5)		(52.5)		(28.2)		(22.0)		(28.3)		(30.5)
Receipts from sale of tangible fixed assets			2.4		1.3		0.7		0.2		1.7		1.1
Payments for intangible fixed assets			(89.1)		(75.5)		(1.8)		(0.6)		(87.3)		(74.9)
Net cash outflow from investing activities			(143.2)		(126.7)		(29.3)		(22.4)		(113.9)		(104.3)
Net cash outflow before financing			(99.1)		(41.7)		(19.7)		(1.2)		(79.4)		(40.5)
Financing													
Capital grants and contributions for the purchase of:													
Tangible fixed assets			(3.6)		(6.6)		(0.1)		(0.1)		(3.5)		(6.5)
Intangible fixed assets			(37.5)		(31.2)		—		—		(37.5)		(31.2)
Net cash inflow from financing			(41.1)		(37.8)		(0.1)		(0.1)		(41.0)		(37.7)
Decrease in cash and cash equivalents	<i>19(b)</i>		(58.0)		(3.9)		(19.6)		(1.1)		(38.4)		(2.8)
			(99.1)		(41.7)		(19.7)		(1.2)		(79.4)		(40.5)

VIII. NOTES TO THE FINANCIAL STATEMENTS

1 SERVICE ACCOUNTS

The term 'Service Accounts' incorporates the water resources, pollution control, fisheries, recreation, conservation and navigation functions.

2 INFORMATION REGARDING BOARD MEMBERS

	1994-95 £000	1993-94 £000
Members' emoluments:-		
Total fees and salaries of Board Members	349	347
The emoluments of:		
the Chairman	56	53
the Chief Executive (also highest paid Board Member)		
- salary	102	99
- payment of performance related pay for previous financial year	8	14
- performance related pay for current financial year	7	7
- employer's pension cost	5	5

The Chief Executive's performance related pay is calculated by reference to the extent to which pre-determined objectives have been achieved and a maximum value of 15% of basic salary. The Chief Executive is an ordinary member of the pension scheme and the NRA pays employers pension contributions at the same rate as for other ordinary members.

The numbers of Board Members (including the Chairman and Chief Executive) who received emoluments, excluding pension contributions, were:

	1994-95 Number	1993-94 Number
£1-5,000	2	—
£5,001-10,000	2	3
£10,001-15,000	6	2
£15,001-20,000	4	6
£20,001-25,000	—	1
£25,001-30,000	—	1
£30,001-35,000	1	—
£35,001-40,000	1	1

All Board Members have been appointed for fixed terms of no longer than three years. Appointments may be terminated earlier if the Authority is abolished before terms are otherwise due to expire.

3 INFORMATION REGARDING EMPLOYEES (INCLUDING CHIEF EXECUTIVE)

	1994-95 £m	1993-94 £m
Salaries and wages	123.9	124.1
Social security costs	10.4	10.4
Other pension costs	6.1	6.1
Other staff related costs	14.6	14.3
Amounts payable under the voluntary severance scheme	9.9	14.2
Compensation payments relating to job evaluation	2.9	—
	167.8	169.1

Note:

The 1993/94 comparative figures include a re-classification of £1.7m from other staff related costs to salaries and wages.

Scale of emoluments of senior employees, excluding pension costs:-

	1994-95 Number	1993-94 Number
£30,001-40,000	114	130
£40,001-50,000	55	53
£50,001-60,000	7	5
£60,001-70,000	9	11
£70,001-80,000	4	2
£110,001-120,000	1	1

Average numbers of persons employed during the year:

	1994-95 Number	1993-94 Number
Senior managers	205	207
Other non-manual employees	5,660	5,825
Manual employees	1,866	2,082
Total	7,731	8,114

No material transactions, arrangements or contracts entered into in which a Board Member, an executive, a higher paid employee, or a person connected with these, at any time during the year, had a direct or indirect material interest, were brought to the attention of the Authority.

4 OPERATING DEFICIT

The operating deficit is arrived at after charging:

	1994-95 £m	1993-94 £m
Auditors' remuneration:		
Audit work	0.2	0.2
Non-audit work	0.2	0.2
Research and development	6.1	5.6
Operating lease rentals	4.4	4.4
Depreciation on tangible fixed assets	30.0	29.0
Expenditure on intangible fixed assets	89.1	75.4
Travelling, transport, subsistence and hospitality costs:		
Board Members	0.1	0.1
Employees	10.7	10.8
Losses and special payments (1,248 in number, 1,335 in 1993/94)	1.2	1.3

Note:

Losses and special payments encompass cash and stores losses, claims waived and abandoned, and fruitless, ex gratia and compensation payments. As regards individual items of value in excess of £25,000, the 1994/95 figure includes a fruitless payment of £43,500 and a constructive loss of £103,000 relating to the abandonment of a water information system in one of the Authority's regions.

5 INTEREST RECEIVABLE

Interest receivable from short-term fixed interest deposits

1994-95 £m	1993-94 £m
9.3	11.4

FINANCIAL STATEMENTS

6 TANGIBLE FIXED ASSETS

(a) Analysis by Type

	See note	Total £m	Freehold Land & Buildings £m	Plant & Machinery £m	Fixtures & Fittings £m	Assets under Construction £m
Cost						
At 1 April 1994		690.3	439.2	138.5	75.5	37.1
Adjustment of opening balances		6.8	6.8	—	—	—
Purchases		56.5	10.1	9.4	10.3	26.7
Disposals		(8.4)	(0.9)	(7.0)	(0.5)	—
Reclassification		—	19.3	7.1	2.3	(28.7)
At 31 March 1995	6(b)	745.2	474.5	148.0	87.6	35.1
Depreciation						
At 1 April 1994		187.9	80.9	66.3	40.7	—
Provided during the year		30.5	8.2	13.6	8.7	—
Disposals		(6.7)	—	(6.2)	(0.5)	—
At 31 March 1995	6(b)	211.7	89.1	73.7	48.9	—
Net Book Value						
At 31 March 1995		533.5	385.4	74.3	38.7	35.1
At 31 March 1994		502.4	358.3	72.2	34.8	37.1

Note: During the course of 1994/95, the Authority undertook a reconciliation between its fixed asset registers and the prime records of land and buildings which it maintains for legal and estates management purposes. The principal result of the exercise was the identification of a number of land holdings which were not included in fixed asset registers and therefore not in the balance sheet. In certain other cases, land holdings had been combined with buildings in fixed asset records and, contrary to Authority policy, depreciated at the same rate as buildings. The difference between fixed asset registers and prime records had arisen because of the varying recording systems and accounting practices of predecessor authorities. The financial effects of the reconciliation are included in the fixed assets account above, described as 'adjustment of opening balances'. The gross value of additions to the account is £6.8m, which is also reflected in the other movements in the capital reserve account given in note 10(a).

(b) Analysis by Function

	See note	Total £m	Flood Defence £m	Service Accounts Total £m	Water Resources £m	Pollution Control £m	Fisheries £m	Recreation £m	Conservation £m	Navigation £m
Cost										
At 1 April 1994		690.3	404.6	285.7	124.8	83.4	24.2	3.8	1.9	47.6
Adjustment of opening balances		6.8	6.3	0.5	0.3	—	0.2	—	—	—
Purchases and reclassifications		56.5	28.3	28.2	10.0	11.9	2.4	0.4	0.9	2.6
Disposals		(8.4)	(5.4)	(3.0)	(0.8)	(1.4)	(0.3)	—	(0.1)	(0.4)
At 31 March 1995	6(a)	745.2	433.8	311.4	134.3	93.9	26.5	4.2	2.7	49.8
Depreciation										
At 1 April 1994		187.9	105.3	82.6	37.8	27.1	7.1	0.8	0.4	9.4
Provided during the year		30.5	15.0	15.5	5.4	7.2	1.6	0.2	0.1	1.0
Disposals		(6.7)	(5.0)	(1.7)	(0.2)	(0.9)	(0.3)	—	—	(0.3)
At 31 March 1995	6(a)	211.7	115.3	96.4	43.0	33.4	8.4	1.0	0.5	10.1
Net Book Value										
At 31 March 1995		533.5	318.5	215.0	91.3	60.5	18.1	3.2	2.2	39.7
At 31 March 1994		502.4	299.3	203.1	87.0	56.3	17.1	3.0	1.5	38.2

7 DEBTORS

	1994-95 £m	1993-94 £m
Within one year		
Trade debtors	4.6	3.8
Other debtors:		
Grants	11.7	9.7
VAT	8.7	10.2
Employee loans	1.3	1.5
Other	0.7	0.3
Water resources expenditure recoverable from abstractors	3.7	0.2
Pollution control expenditure recoverable from consent holders	—	0.8
Prepayments and accrued income	4.8	6.1
	35.5	32.6
More than one year		
Employee loans	1.7	1.8
	37.2	34.4

8 CREDITORS

	1994-95 £m	1993-94 £m
Within one year		
Trade creditors	10.9	8.9
Accruals and other creditors	8.0	9.2
Capital creditors	30.2	28.3
Due to Government:		
Water resources surplus	—	7.6
Pollution control surplus	—	1.9
Returnable to Government:		
Water resources surplus to be used to fund grant-aided functions in 1995-96	1.6	0.6
Grant-in-aid carried forward	—	0.8
Water resources income repayable to abstractors	4.1	15.8
Pollution control income repayable to consent holders	0.6	—
Tax and social security	4.1	3.9
Customer deposits and receipts in advance	1.5	1.2
Finance leases	0.1	0.1
	61.1	78.3
More than one year		
Finance leases	0.1	0.1
Capital creditors	1.0	1.0
Added years' pension accruals	9.3	5.9
Other creditors	0.3	0.3
	10.7	7.3

Note:

The 1993/94 comparative figures include an analysis of added years' pension accruals between 'within one year' (included in accruals and other creditors) and 'more than one year', which was not available at the time of the publication of the financial statements for that year.

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9 DEFERRED GRANTS AND CONTRIBUTIONS

	1994-95	1993-94
	£m	£m
At 1 April 1994	28.7	22.6
Amounts receivable in the year	3.6	6.8
Amortisation in year	(0.8)	(0.7)
At 31 March 1995	31.5	28.7

In addition to the deferred grants and contributions receivable in respect of tangible fixed assets, there were grants receivable of £37.5m (1994 - £31.2m) relating to intangible assets written off in the year.

10 RESERVES AND RETAINED SURPLUSES

(a) Capital Reserve

	Total	Service Accounts	Flood Defence
	£m	£m	£m
At 1 April 1994	473.7	198.6	275.1
Movements in the year:			
Transfer from income and expenditure account	21.5	11.5	10.0
Other	6.8	0.5	6.3
At 31 March 1995	502.0	210.6	291.4

Notes:

The transfer from income and expenditure account is calculated as follows:

	Total	Service Accounts	Flood Defence
	£m	£m	£m
Purchase of fixed assets	56.5	28.2	28.3
Grants and contributions (net)	(2.8)	0.1	(2.9)
Depreciation (including capitalised depreciation)	(30.5)	(15.5)	(15.0)
Disposals	(1.7)	(1.3)	(0.4)
	21.5	11.5	10.0

The other movement relates to the addition to asset values resulting from the reconciliation of fixed asset registers with prime records of land and buildings which is more fully explained in note 6.

(b) Special Asset Replacement Fund

	£m
At 1 April 1994	44.6
Movement in the year:	
Transfer to income and expenditure account	(16.4)
At 31 March 1995	28.2

Note: The transfer to the income and expenditure account is calculated as follows:

Interest receivable	2.0
Capital costs incurred	(18.4)
	(16.4)

11 CONTINGENT LIABILITIES

The Authority has the following unprovided contingent liabilities:-

	1995	1994
	£m	£m
(a) Staff bridging loan guarantees	0.5	1.0
(b) Public liability claims	0.6	0.3
(c) Disputed contractors' claims	0.3	2.7

The Authority has received a number of other significant claims from contractors for additional costs in carrying out capital works and has accrued sums in the accounts on the basis of best assessments of outstanding liabilities. Although the difference between accruals and the total values of claims remains substantial, no contingent liabilities have been declared as those claims are not subject to arbitration or other processes for resolving disputes between parties to contracts.

12 CAPITAL COMMITMENTS

	1995	1994
	£m	£m
Contracted for but not provided in the financial statements	23.4	22.6
Authorised but not yet contracted for	164.5	115.1

13 OPERATING LEASES

At 31 March 1995 the Authority had annual commitments under operating leases as follows:-

	1995 Land & Buildings £m	1995 Other £m	1994 Land & Buildings £m	1994 Other £m
Leases expiring:				
Within one year	0.1	0.2	—	0.1
In the second to fifth years incl.	0.2	1.0	0.5	0.9
Over 5 years	3.0	—	2.6	—
	3.3	1.2	3.1	1.0

14 PENSION OBLIGATIONS

The Authority operates a defined benefit pension scheme for employees and transferees from the former water authorities. It is a statutory scheme under the Local Government Superannuation Regulations 1986.

The total pension cost for the Authority was £6.6m (1994 - £6.7m). The pension cost relating to the scheme is assessed in accordance with the advice of an independent qualified actuary using the projected unit method. The latest actuarial valuation of the scheme for which results are available was at 31 March 1992. The assumptions that have the most significant effect on the valuation are those relating to the rate of return on investments and the rates of increase in salaries and pensions. It was assumed that the investment return would be 9½% per annum, that salary increases would average 7% per annum and that present and future pensions would increase at the rate of 5½% per annum.

At the date of the latest actuarial valuation, the market value of the assets of the pension scheme was £297.5m. The actuarial value of the assets (using the projected unit method) was sufficient to cover 152% of the benefits which had accrued to members. The independent consulting actuaries to the fund have issued a certificate to the effect that liabilities were fully funded within Inland Revenue regulations. The regulations governing the pension scheme prevent surpluses

from being applied to reductions in members' contributions or improvements to pensioners' benefits.

In the year, the Authority accrued a total of £4.1m relating to the future liabilities for enhancements to ex-employees' pension arrangements which were approved during the year in accordance with the Authority's voluntary severance scheme.

The Authority also effected aggregate payments of £12.0m in respect of unfunded pensions to former water industry employees, on behalf of the government.

15 INSURANCE

Apart from statutory insurance requirements and certain risks covered with the approval of the DoE, the Authority follows a strategy of self-insurance in accordance with the Financial Memorandum.

16 CORPORATION TAX

On 27 July 1988 the Inland Revenue confirmed that the Authority was exempted from tax because it met the definition of a local authority for tax purposes set out in Section 519(4) of the Taxes Act 1988, which was subsequently replaced by Section 842A of the same Act. Accordingly no amounts for corporation tax have been provided in the financial statements.

FINANCIAL STATEMENTS

17 ANALYSIS OF INCOME, EXPENDITURE AND SURPLUSES BY FUNCTION

	Total Service Accounts £m	Water Resources £m	Pollution Control £m	Fisheries £m	Recreation & Conservation £m	Navigation £m	Job Evaluation £m
Income							
Abstraction charges	80.0	80.0	—	—	—	—	—
Tolls	0.1	—	—	—	—	0.1	—
Licence fees	2.3	—	—	—	—	2.3	—
Fishing licence duties	12.2	—	—	12.2	—	—	—
Charges	40.9	—	40.9	—	—	—	—
Other income	7.0	0.7	4.2	0.9	0.5	0.7	—
Income from activities	142.5	80.7	45.1	13.1	0.5	3.1	—
Government grant-in-aid	55.7	—	31.1	11.1	7.7	2.9	2.9
Capital grants and contributions	0.2	—	0.2	—	—	—	—
Sale of assets	0.7	0.1	0.1	0.2	0.1	0.2	—
	199.1	80.8	76.5	24.4	8.3	6.2	2.9
Interest receivable	1.9	1.8	0.1	—	—	—	—
Total income, including interest	201.0	82.6	76.6	24.4	8.3	6.2	2.9
Expenditure							
Staff costs	96.1	28.9	44.6	14.0	3.3	2.4	2.9
Depreciation and expenditure on intangible fixed assets	17.6	5.9	7.4	2.4	0.9	1.0	—
Other operating costs:							
Contracted out services	50.7	26.6	18.1	3.2	2.1	0.7	—
Materials	12.2	3.7	6.3	1.5	0.4	0.3	—
Other	17.2	6.5	7.1	2.6	0.7	0.3	—
	193.8	71.6	83.5	23.7	7.4	4.7	2.9
Surplus/(deficit) for year	7.2	11.0	(6.9)	0.7	0.9	1.5	—

Note:

Expenditure on job evaluation relates to compensation payments to staff following the introduction of revised grading arrangements and associated changes to conditions of service.

18 ANALYSIS OF FLOOD DEFENCE INCOME AND EXPENDITURE

	Total £m
Income	
Local authority levies	142.3
General drainage charges	2.7
Internal drainage boards	6.2
Contributions from beneficiaries	0.2
Other income	4.1
Income from activities	155.5
Capital grants and contributions	38.1
Sale of assets	1.7
	195.3
Interest receivable	7.4
Total income, including interest	202.7
Expenditure	
Staff costs	71.7
Depreciation and expenditure on intangible fixed assets	101.5
Other operating costs:	
Contracted out services	29.0
Materials	12.1
Internal drainage boards	2.4
Other	12.9
	229.6
Deficit for year	(26.9)

19 NOTES TO THE CASH FLOW STATEMENT

(a) Reconciliation of Operating Surplus to Net Cash Inflow from Operating Activities

	1994-95	1993-94	1994-95	1993-94	1994-95	1993-94
	Total	Total	Service	Service	Flood	Flood
			Accounts	Accounts	Defence	Defence
	£m	£m	£m	£m	£m	£m
Operating (deficit)/surplus for the year	(29.0)	(3.0)	5.3	0.1	(34.3)	(3.1)
Depreciation and expenditure on intangible fixed assets	83.7	73.8	18.4	15.7	65.3	58.1
Other non cash movements	(0.7)	0.3	—	—	(0.7)	0.3
Sale of assets	(2.4)	(1.3)	(0.7)	(0.2)	(1.7)	(1.1)
(Increase)/decrease in stocks and work in progress	(0.2)	0.3	(0.3)	—	0.1	0.3
(Increase)/decrease in debtors	(2.8)	(2.5)	0.8	(0.7)	(3.6)	(1.8)
(Decrease)/increase in creditors	(13.8)	6.0	(15.8)	3.9	2.0	2.1
Net cash inflow from operating activities	34.8	73.6	7.7	18.8	27.1	54.8

(b) Analysis of Movement in Cash as shown in the Balance Sheet

At 31 March 1995	84.2	142.2	7.7	27.3	76.5	114.9
At 1 April 1994	142.2	146.1	27.3	28.4	114.9	117.7
Decrease in cash	(58.0)	(3.9)	(19.6)	(1.1)	(38.4)	(2.8)

Note:

Cash includes short-term deposits for which repayment notice is required.

IX. SUPPORTING STATEMENTS

(a) Analysis of Receipts and Payments for the Year Ended 31 March 1995

	Total £m	Flood Defence £m	Total Service Accounts £m	Water Resources £m	Pollution Control £m	Fisheries £m	Recreation & Conservation £m	Navigation £m	Job Evaluation £m	Unfunded Pensions £m
Receipts										
Precepts, levies	157.6	157.6	—	—	—	—	—	—	—	—
Abstraction charges	64.8	—	64.8	64.8	—	—	—	—	—	—
Navigation licence receipts	2.3	—	2.3	—	—	—	—	2.3	—	—
Other operating receipts	61.8	—	61.8	—	46.4	13.8	0.6	1.0	—	—
Capital grants and contributions:										
Ministry of Agriculture, Fisheries and Food	34.9	34.9	—	—	—	—	—	—	—	—
Welsh Office	0.4	0.4	—	—	—	—	—	—	—	—
Other	2.0	2.0	—	—	—	—	—	—	—	—
Interest received	9.3	7.4	1.9	1.8	0.1	—	—	—	—	—
Grant-in-aid	69.3	—	69.3	—	34.1	10.0	7.3	3.0	2.9	12.0
Total receipts	402.4	202.3	200.1	66.6	80.6	23.8	7.9	6.3	2.9	12.0
Payments										
Operating costs	296.6	126.8	169.8	62.6	74.1	20.5	6.1	3.6	2.9	—
Fixed assets	112.8	113.9	28.9	10.8	10.5	3.1	1.8	2.7	—	—
Unfunded pensions	12.0	—	12.0	—	—	—	—	—	—	12.0
Water resources cash surplus applied to grant-aided functions in year	—	—	—	4.0	(4.0)	—	—	—	—	—
Repayments to Government re 1993-94	9.0	—	9.0	8.2	0.8	—	—	—	—	—
Total payments	460.4	240.7	219.7	85.6	81.4	23.6	7.9	6.3	2.9	12.0
Cash (deficits)/surplus	(58.0)	(38.4)	(19.6)	(19.0)	(0.8)	0.2	—	—	—	—
Opening cash at bank and in hand	142.2	114.9	27.3	25.7	0.8	0.8	—	—	—	—
Closing cash at bank and in hand	84.2	76.5	7.7	6.7	—	1.0	—	—	—	—
Analysis of closing cash at bank and in hand										
Flood defence balances	76.5	76.5	—	—	—	—	—	—	—	—
Water resources purposes	5.1	—	5.1	5.1	—	—	—	—	—	—
Special fisheries funds	1.0	—	1.0	—	—	1.0	—	—	—	—
Carried forward for general purposes (for grant-aided functions)	1.6	—	1.6	1.6	—	—	—	—	—	—
Closing cash at bank and in hand	84.2	76.5	7.7	6.7	—	1.0	—	—	—	—

FINANCIAL STATEMENTS

b) Flood Defence Income and Expenditure Account for Year Ended 31 March 1995

	Anglian					Northumbria & Yorkshire		North West	Severn- Trent	Southern			
	Essex	Great Ouse	Lincs	Norfolk & Suffolk	Welland & Nene	North- umbria	Yorkshire			Isle of Wight	Hamp- shire	Sussex	Kent
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Income													
Local authority levies	8.5	5.8	4.8	5.8	3.8	2.8	13.3	18.7	23.4	0.3	1.4	6.0	7.1
General drainage charges	0.5	0.6	0.6	0.7	0.3	—	—	—	—	—	—	—	—
Internal drainage boards	—	1.8	1.3	0.4	0.2	—	0.6	—	0.6	—	—	0.1	0.7
Contributions from beneficiaries	—	—	0.1	—	—	—	—	—	—	—	—	—	—
Other income	0.3	0.3	0.2	0.1	0.2	0.3	0.9	0.3	0.2	—	—	0.1	0.5
Capital grants and contributions	2.6	4.2	9.6	5.4	1.1	0.1	2.0	0.3	0.6	0.9	0.1	1.8	3.1
Sale of assets	0.1	0.1	0.2	—	—	—	0.5	—	0.2	—	—	—	—
Interest receivable	0.4	0.4	0.6	0.2	0.2	0.1	0.3	0.6	0.4	—	0.1	0.1	0.3
Total income, including interest	12.4	13.2	17.4	12.6	5.8	3.3	17.6	19.9	25.4	1.2	1.6	8.1	11.7
Expenditure													
Main river:													
Inland waters	2.2	3.1	2.4	1.5	2.0	0.4	2.8	7.8	10.4	0.2	0.9	2.4	3.5
Tidal waters	1.9	0.3	0.3	1.2	0.1	0.5	0.6	0.4	1.2	—	0.1	0.7	0.8
Sea defence	1.0	0.1	0.4	0.2	0.1	—	—	0.4	0.3	—	0.3	1.7	2.6
Flood warning	0.1	0.1	—	—	—	0.2	0.2	0.3	0.3	—	—	—	0.1
Other works	0.9	0.8	0.6	0.5	0.5	1.3	5.6	5.5	2.8	—	—	0.1	0.4
Depreciation and expenditure on intangible fixed assets	6.5	9.4	13.0	8.8	2.6	1.1	7.6	5.5	6.3	1.4	0.5	4.1	6.3
Internal drainage boards	—	1.1	0.6	0.4	—	—	—	—	—	—	—	0.1	0.2
Total expenditure	12.6	14.9	17.3	12.6	5.3	3.5	16.8	19.9	21.3	1.6	1.8	9.1	13.9
(Deficit)/surplus for year	(0.2)	(1.7)	0.1	—	0.5	(0.2)	0.8	—	4.1	(0.4)	(0.2)	(1.0)	(2.2)
Transfers (to)/from reserves													
Capital	(0.7)	(0.5)	(0.3)	(0.4)	(0.8)	(0.2)	(0.3)	(1.8)	(5.9)	—	—	0.2	—
Special asset replacement fund	—	—	—	—	—	—	—	—	—	—	—	—	—
	(0.9)	(2.2)	(0.2)	(0.4)	(0.3)	(0.4)	0.5	(1.8)	(1.8)	(0.4)	(0.2)	(0.8)	(2.2)
Balance brought forward	2.6	3.6	6.9	1.0	0.7	0.1	(0.3)	4.7	3.1	0.4	1.1	1.6	3.2
Balance carried forward	1.7	1.4	6.7	0.6	0.4	(0.3)	0.2	2.9	1.3	—	0.9	0.8	1.0
Analysis of:													
Capital expenditure	7.9	10.0	13.2	9.4	3.4	1.4	8.7	7.4	13.3	1.4	0.4	3.9	6.5
Grant receipts – MAFF	2.6	4.1	9.2	5.0	1.0	—	1.8	0.4	1.5	0.1	0.1	1.3	3.3
Grant receipts – Welsh Office	—	—	—	—	—	—	—	—	—	—	—	—	—

FINANCIAL STATEMENTS

South Western				Thames	Welsh						Total
South West	Avon & Dorset	Wessex Bristol & Avon	Somerset		Dee & Chwyd	Gwynedd	Wye	Usk	Glamorgan	South West Wales	
£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
7.2	3.0	1.9	4.1	15.5	2.3	1.7	0.8	0.6	1.8	1.7	142.3
—	—	—	—	—	—	—	—	—	—	—	2.7
—	—	—	0.2	—	—	—	—	0.3	—	—	6.2
—	—	—	—	—	—	—	—	—	0.1	—	0.2
—	—	—	0.1	0.5	—	0.1	—	—	—	—	4.1
1.9	1.3	0.1	0.6	1.3	—	0.6	—	0.4	—	0.1	38.1
0.1	0.1	—	0.1	0.3	—	—	—	—	—	—	1.7
0.2	0.1	0.1	0.1	2.9	—	—	—	0.1	0.1	0.1	7.4
9.4	4.5	2.1	5.2	20.5	2.3	2.4	0.8	1.4	2.0	1.9	202.7
Income											
Local authority levies											
General drainage charges											
Internal drainage boards											
Contributions from beneficiaries											
Other income											
Capital grants and contributions											
Sale of assets											
Interest receivable											
Total income, including interest											
Expenditure											
Main river:											
1.9	0.5	0.7	2.2	15.1	1.8	1.0	0.6	0.8	1.8	1.1	67.1
1.0	0.4	0.1	0.2	—	0.1	0.4	—	—	—	0.2	10.5
0.1	0.2	—	0.3	—	—	0.1	—	0.2	—	0.1	8.1
0.4	0.1	0.2	0.1	1.7	0.1	—	0.1	—	0.1	0.1	4.2
1.1	0.7	0.8	1.2	12.7	—	—	—	—	0.1	0.2	35.8
Depreciation and expenditure on intangible fixed assets											
4.5	2.7	0.6	1.8	17.0	0.2	0.7	0.1	0.2	0.3	0.3	101.5
—	—	—	—	—	—	—	—	—	—	—	2.4
9.0	4.6	2.4	5.8	46.5	2.2	2.2	0.8	1.2	2.3	2.0	229.6
0.4	(0.1)	(0.3)	(0.6)	(26.0)	0.1	0.2	—	0.2	(0.3)	(0.1)	(26.9)
Total expenditure											
(Deficit)/surplus for year											
(0.3)	(0.1)	(0.1)	(0.2)	1.5	(0.1)	—	—	—	(0.1)	0.1	(10.0)
Transfers (to)/from reserves											
Capital											
Special asset replacement fund											
—	—	—	—	16.4	—	—	—	—	—	—	16.4
0.1	(0.2)	(0.4)	(0.8)	(8.1)	—	0.2	—	0.2	(0.4)	—	(20.5)
1.6	1.5	0.9	1.3	10.4	0.5	0.5	0.1	0.8	1.0	1.0	48.3
1.7	1.3	0.5	0.5	2.3	0.5	0.7	0.1	1.0	0.6	1.0	27.8
Balance brought forward											
Balance carried forward											
Analysis of:											
4.8	2.8	0.8	2.2	16.0	0.3	0.8	0.1	0.2	0.3	0.4	115.6
1.6	0.8	—	0.9	1.2	—	—	—	—	—	—	34.9
—	—	—	—	—	—	0.4	—	—	—	—	0.4
Grant receipts – MAFF											
Grant receipts – Welsh Office											

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(c) Water Resources Account by Region for the Year Ended 31 March 1995

	Total	Anglian	Northumbria & Yorkshire		North West	Severn-Trent	Southern	South Western		Thames	Welsh
			Northumbria	Yorkshire				South West	Wessex		
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
At 1 April 1994	13.1	1.5	1.9	0.9	0.2	2.5	2.2	0.8	0.4	2.9	(0.2)
Income receivable	67.3	12.4	8.8	3.0	5.7	7.5	5.8	3.4	3.6	7.2	9.9
	80.4	13.9	10.7	3.9	5.9	10.0	8.0	4.2	4.0	10.1	9.7
Expenditure	80.1	13.0	12.9	4.6	6.3	9.4	7.1	3.8	3.6	9.3	10.1
At 31 March 1995	0.3	0.9	(2.2)	(0.7)	(0.4)	0.6	0.9	0.4	0.4	0.8	(0.4)

Note: Expenditure shown in the table includes current cost depreciation and rate of return. Each region of the Authority maintains its own water resources account and operates a national charging scheme with regional unit rates which are determined from local circumstances and approved by the Board. This table shows the water resources income and expenditure account by region.

In its charges to abstractors, the Authority is required to provide for a 2% rate of return on the current cost value of water resources assets which were transferred to it on 1 September 1989 and an 8% return on assets purchased subsequently. Charges must also provide for current cost depreciation on water resources assets. The rate of return and current cost depreciation have been calculated as follows:-

Rate of return:

	Current cost value £m	Required rate of return %	Amount of return £m
Assets transferred on 1 September 1989	159.3	2	3.2
Assets acquired since 1 September 1989	47.2	8	3.8
Totals	206.5		7.0

Current cost depreciation:

Water resources asset values at 1 April 1994
Additions

Water resources asset values at 31 March 1995

Current cost depreciation for year

£m
200.6
15.8
216.4
206.5
9.9

(d) Pollution Control Account

	Total £m	General environmental pollution control £m	Charging for discharges activities £m
Income receivable	46.9	5.3	41.6
Expenditure (including current cost depreciation)	84.8	44.6	40.2
Totals	(37.9)	(39.3)	1.4
At 1 April 1994	(0.8)	—	(0.8)
At 31 March 1995	(38.7)	(39.3)	0.6

Charging for discharges activities relate to the granting of consents for direct discharges of effluent to water courses and the monitoring and control of those discharges. General environmental pollution control comprises the remaining activities of the pollution control function. Charges to applicants for and holders of discharge consents must provide for current cost depreciation on relevant assets.

(e) Navigation Account

The navigation function was not required to fully recover costs through income from charges in 1994/95 and therefore the income and expenditure account in note 17 does not include current cost depreciation and rate of return. Had there been charges to navigation for current cost depreciation and rate of return, the account would have been as follows:

	£m
Income	
Income from activities and sale of assets	3.3
Government grant-in-aid	2.9
	6.2
Expenditure	
Staff costs	2.4
Other operating costs	1.3
Current cost depreciation and rate of return	5.5
	9.2
Deficit for year	(3.0)

(f) Grant-in-Aid Received in the Year

The following statement shows the amount of grant-in-aid received from the Department of the Environment according to the budgetary provision in Class VII, Vote 5 of the parliamentary supply estimates:

	£m	£m
Grant-in-aid received in the year		60.3
Offset of amounts due to the DoE in respect of previous year:		
Grant-in-aid returnable	1.4	
Water resources surplus	7.6	9.0
Gross entitlement in analysis of receipts and payments		69.3
Water resources surplus for current year:		
To be used to fund grant-aided functions in 1995-96		(1.6)
Grant-in-aid received for unfunded pensions		(12.0)
Grant-in-aid included in income and expenditure account		55.7

FINANCIAL STATEMENTS

(g) 5 Year Summary of Results: Income and Expenditure Account

	1994-95	1992-93		1990-91		1994-95	1992-93		1990-91		1994-95	1992-93		1990-91	
	Total	1993-94	1991-92	Total	Total	Service Accounts	Service Accounts	Service Accounts	Service Accounts	Service Accounts	Flood Defence	Flood Defence	Flood Defence	Flood Defence	Flood Defence
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Gross income	394.4	401.5	412.7	400.2	347.0	199.1	188.7	185.9	185.2	155.1	195.3	212.8	226.8	215.0	191.9
Operating costs	423.4	404.5	383.9	373.2	324.8	193.8	188.6	174.7	162.8	137.9	229.6	215.9	209.2	210.4	186.9
Operating (deficit)/surplus	(29.0)	(3.0)	28.8	27.0	22.2	5.3	0.1	11.2	22.4	17.2	(34.3)	(3.1)	17.6	4.6	5.0
Interest receivable (net)	9.3	11.4	15.1	16.6	21.4	1.9	2.4	2.8	3.6	5.3	7.4	9.0	12.3	13.0	16.1
(Deficit)/surplus for year	(19.7)	8.4	43.9	43.6	43.6	7.2	2.5	14.0	26.0	22.5	(26.9)	5.9	29.9	17.6	21.1
Transfers (to)/from reserves	(5.1)	(15.6)	(25.3)	(33.1)	(55.2)	(11.5)	(6.8)	(13.4)	(18.4)	(33.4)	6.4	(8.8)	(11.9)	(14.7)	(21.8)
Retained (deficit)/surplus for year	(24.8)	(7.2)	18.6	10.5	(11.6)	(4.3)	(4.3)	0.6	7.6	(10.9)	(20.5)	(2.9)	18.0	2.9	(0.7)
Balance brought forward	48.6	55.8	37.2	26.7	38.3	0.3	4.6	4.0	(3.6)	7.3	48.3	51.2	33.2	30.3	31.0
Balance carried forward	23.8	48.6	55.8	37.2	26.7	(4.0)	0.3	4.6	4.0	(3.6)	27.8	48.3	51.2	33.2	30.3

FINANCIAL STATEMENTS

(h) 5 Year Summary of Results: Balance Sheet

	1990-91	1992-93		1990-91		1993-94	1991-92		1994-95	1992-93		1990-91	1993-94	1991-92	
	Total	Total	Total	Total	Total	Service Accounts	Service Accounts	Service Accounts	Service Accounts	Service Accounts	Flood Defence	Flood Defence	Flood Defence	Flood Defence	Flood Defence
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Fixed assets	533.5	502.4	480.2	448.6	411.7	215.0	203.1	199.7	186.5	168.8	318.5	299.3	280.5	262.1	242.9
Net current assets	62.7	100.5	114.0	92.3	78.4	0.6	3.3	16.9	13.3	4.5	62.1	97.2	97.1	79.0	73.9
Total assets less current liabilities	596.2	602.9	594.2	540.9	490.1	215.6	206.4	216.6	199.8	173.3	380.6	396.5	377.6	341.1	316.8
Financed by															
Creditors: amounts due after more than one year	10.7	7.3	10.6	8.4	8.0	4.6	3.0	9.8	7.4	6.5	6.1	4.3	0.8	1.0	1.5
Provision	—	—	2.5	1.9	1.6	—	—	2.5	1.9	1.6	—	—	—	—	—
Deferred grants and contributions	31.5	28.7	22.6	16.0	8.8	4.4	4.5	4.4	4.6	3.0	27.1	24.2	18.2	11.4	5.8
Reserves															
Capital reserve	502.0	473.7	457.6	432.6	402.9	210.6	198.6	195.3	181.9	165.8	291.4	275.1	262.3	250.7	237.1
Income and expenditure account	23.8	48.6	55.8	37.2	26.7	(4.0)	0.3	4.6	4.0	(3.6)	27.8	48.3	51.2	33.2	30.3
Special asset replacement fund	28.2	44.6	45.1	44.8	42.1	—	—	—	—	—	28.2	44.6	45.1	44.8	42.1
	596.2	602.9	594.2	540.9	490.1	215.6	206.4	216.6	199.8	173.3	380.6	396.5	377.6	341.1	316.8

X. DIRECTION ON THE ANNUAL ACCOUNTS

The Secretary of State for the Environment, the Secretary of State for Wales and the Minister of Agriculture, Fisheries and Food, with the consent of the Treasury and in accordance with Section 121(2) of the Water Resources Act 1991, hereby notify the National Rivers Authority (hereinafter referred to as "the Authority") of the following requirements in respect of its annual accounts.

1. The annual accounts, which it is the duty of the Authority to prepare in respect of each financial year, shall comprise:

- (a) a foreword
- (b) an income and expenditure account
- (c) a statement of total recognised gains and losses
- (d) a balance sheet
- (e) an analysis of receipts and payments
- (f) a cash flow statement

including in each case such notes and additional information as may be necessary for the purposes referred to in paragraphs 2 and 3 below. The Authority should observe all relevant guidance given in "Government Accounting" and in "Trading Accounts: a Guide for Government Departments and Non-Departmental Public Bodies" as amended or augmented from time to time and except if superseded by this direction.

2. The annual accounts shall give a true and fair view of the income and expenditure, state of affairs and cash flows of the Authority. Subject to the foregoing requirements, without limiting the information given, and save as described in Schedule 1 to this direction and, where applicable, shall follow:

- (a) the accounting and disclosure requirements of companies legislation for the time being in force
- (b) the best commercial accounting practice including accounting standards adopted or issued by the Accounting Standards Board
- (c) any additional disclosure or accounting requirements that the Treasury may issue from time to time in respect of accounts that are required to give a true and fair view

- (d) any additional disclosure requirement contained in "The Fees and Charges Guide", in particular those relating to the need for appropriate segmental information for any services, or forms of services provided, and for which a charge is made.

3. The annual accounts shall include the information set out in Schedules 1 and 2 to this direction, and in these Schedules, undefined technical terms have the meaning ascribed to them by generally accepted accounting practice in the United Kingdom or by the Companies Act 1985
4. A copy of this direction shall be published with the annual accounts.
5. This direction replaces that dated 31 March 1992.

Signed on behalf of the Secretary of State for the Environment

M NELSON

A grade 5 Officer in the Department of the Environment

Date 7 July 1994

Signed on behalf of the Secretary of State for Wales

A H H JONES

A Grade 5 Officer in the Welsh Office

Date 7 July 1994

Signed on behalf of the Minister of Agriculture, Fisheries and Food

R HATHAWAY

A Grade 5 Officer in the Ministry of Agriculture, Fisheries and Food

Date 7 July 1994

(Since the issue of the accounts direction, sub-paragraphs 1(b)(ii) and 1(b)(iii) of Schedule 2 have been revised with the agreement of the Treasury. Schedule 2, as printed below, incorporates the necessary amendments.)

Schedule 1

1. The disclosure exemptions for small and medium-sized companies permitted by the Companies Act 1985 shall not apply to the Authority.
2. Except where described otherwise in this direction, references in the Companies Act 1985 to "directors" shall be taken to be references to Board Members of the Authority.
3. There shall be a foreword to the annual accounts which shall contain the information required by the Companies Act 1985 to be disclosed in the Directors' Report. The foreword shall show the surplus or deficit for the year after tax and before transfers to reserves, and shall be signed and dated by the Accounting Officer.
4. The Authority's balance sheet shall be in format 1 as set out in schedule 4 to the Companies Act 1985 and that format shall be applied in such a manner that the items set out in paragraph 2 of Schedule 2 to this direction are separately disclosed.
5. In the balance sheet, a total shall be struck at "Total Assets less Current Liabilities".
6. The balance sheet shall be signed and dated by the Accounting Officer.
7. The profit and loss account formats in schedule 4 to the Companies Act 1985 shall not apply to the Authority's income and expenditure account which shall be in such a format as is necessary to disclose separately the information set out in paragraph 1 of Schedule 2 to this direction.
8. The cash flow statement shall be drawn up using the "direct" method of reporting, and following the illustrative example 2 in Financial Reporting Standard No.1.

Schedule 2

1. The income and expenditure account or the notes thereto shall disclose, in addition to the disclosure required by paragraphs 2 and 3 of this direction, for each class of business:

(a) the following income -

- (i) Government grant-in-aid
- (ii) capital grants identified as to each source
- (iii) abstraction charges
- (iv) flood defence levies
- (v) contributions from flood defence beneficiaries
- (vi) local authority levies
- (vii) general drainage charges
- (viii) contributions from internal drainage boards
- (ix) discharge consents
- (x) navigation licence income
- (xi) fishing licence duties
- (xii) interest receivable
- (xiii) proceeds from sales of fixed assets
- (xiv) other income

(b) the following expenditure -

- (i) for services that are required to recover costs, the estimated monetary advantage in the year to the Authority (ignoring payments for uninsured losses) of self insuring, where this applies, and in which case there shall be a corresponding credit to a provision in the balance sheet for uninsured losses
- (ii) as part of operating costs, for services that are required to recover costs, except for water abstraction and navigation (see sub paragraph (iii) below), and discharge consents and fisheries charges (to which this sub paragraph does not apply), the notional cost of capital, being an amount calculated as 6% of the mean average of the balance sheet values of total assets less current liabilities relating to such services during the year, less any actual interest payable on borrowings repayable after more than one year, and less any finance charges payable in respect of finance leases, to the extent that the capital element of the lease is repayable after more than one year
- (iii) for water abstraction and navigation, as part of operating costs, the notional cost of capital, being an amount calculated as the sum of 2% of the net current cost value of relevant assets transferred to the Authority on 1 September 1989 and 8% of the net current cost value of relevant assets acquired thereafter

- (iv) contracted services
 - (v) materials
 - (vi) contributions to internal drainage boards
 - (vii) expenditure on intangible assets
 - (viii) other administrative expenditure
 - (ix) interest payable
 - (x) other operating costs
- (c) on the line below the result for the year, an entry reversing the above notional cost of capital
- (d) the income and expenditure account balance brought forward, movements in the year and balance carried forward, which for flood defence, shall be calculated in accordance with Section 47 of the Land Drainage Act 1976.
2. The balance sheet shall show, in addition to the disclosure required by paragraphs 1 and 2 of this direction, an analysis of reserves between:
- (a) income and expenditure account for service accounts
 - (b) income and expenditure account for flood defence
 - (c) capital reserve for service accounts
 - (d) capital reserve for flood defence
 - (e) special asset replacement fund.
3. The analysis of receipts and payments or the notes thereto shall show inter alia for each class of business:
- (a) under "Receipts" similar headings to those used for income in paragraph 2 to this Schedule and, in addition, the following items -
 - (i) capital grants from the Ministry of Agriculture, Fisheries and Food,
 - (ii) capital grants from the Welsh Office
 - (iii) other capital grants
 - (b) under "Payments" the following items -
 - (i) revenue payments
 - (ii) capital - ordinary
 - (iii) capital - restructuring
 - (iv) unfunded pensions
 - (v) grant-in-aid repaid
 - (c) cash balances brought forward and carried forward.
4. For the purposes of this Schedule, the classes of business shall be Water Resources, Flood Defence, Pollution Control, Navigation, Fisheries, and Recreation and Conservation. Headquarters, central services, and research and development shall be apportioned to each class of business.
5. The notes to the annual accounts shall include, in addition to the disclosure required by paragraphs 1 and 2 of this direction:
- (a) an analysis of flood defence income and expenditure by local flood defence districts, demonstrating that revenue raised in a district is spent only on flood defence functions in that district or for certain other purposes as specified in Section 118(3) of the Water Resources Act 1991;
 - (b) analysis of flood defence capital expenditure and grant receipts by local flood defence districts;
 - (c) analysis of fixed assets by class of business with separate disclosure of additions, reclassification and disposals;
 - (d) a statement of the number of employees during the year, other than Board Members, whose emoluments excluding pension contributions, fell in each bracket of a scale in multiples of £10,000 per annum, starting at £30,000 per annum;
 - (e) a statement of the total emoluments of Board Members during the year, including salaries, fees, pension contributions, compensation payments, and estimated money value of non-cash benefits;
 - (f) a statement showing the emoluments of the Chairman, the highest paid Board Member and the Chief Executive during the year, excluding pension contributions, with separate disclosure where more than one person occupied those offices during the year; for this purpose, emoluments shall be split into salary and performance related elements, and the basis on which performance is measured shall be explained;
 - (g) a statement of the number of all Board Members during the year whose emoluments, excluding pension contributions fell in each bracket of a scale in multiples of £5,000;

- (h) a statement of the average number of persons employed during the year, including part-time employees, excluding non-executive Board Members, analysed between senior management, non-manual, and manual employees;
- (i) a statement of employee costs during the year, excluding non-executive Board Members, showing separately—
 - (i) wages and salaries
 - (ii) social security costs
 - (iii) contributions to self administered pension schemes
 - (iv) payments for unfunded pensions.
 - (v) any enhanced or special pension contribution for the Chief Executive
 - (vi) other pension costs, analysed as between defined contribution schemes and defined benefit schemes;
- (j) particulars of any transaction, arrangement or contract (other than a contract of service or of employment) entered into by the Authority with another party in which a Board Member, an executive, a higher paid employee, or a person connected with these, at any time during the year, had a direct or indirect financial interest exceeding £1,000 (including transactions at arm's length and assuming that the office of director constitutes an interest);
- (k) a statement of the total expenses payable for the year to Board Members and employees respectively, expenses being reimbursements and payments in respect of travelling, subsistence and hospitality;
- (l) a statement of losses and special payments during the year, being transactions of a type which Parliament cannot be supposed to have contemplated. Disclosure shall be made of the total of losses and special payments if this exceeds £25,000, with separate disclosure and particulars of any individual amounts in excess of £25,000. Disclosure shall also be made of any loss or special payment of £25,000 and below if it is considered material in the context of the Authority's operations;
- (m) a summary of the water resources account by region showing balances brought forward, income, expenditure and balances carried forward;
- (n) a summary of financial statistics covering the last five years. This should be prepared using accounting policies consistent with those used in the latest year shown and using similar formats to the income and expenditure account and balance sheet;
- (o) a statement of grant-in-aid received in the year, referring to the appropriate vote and class, and analysed by the headings in the relevant supply estimates, and reconciled to the income and expenditure account and to the analysis of receipts and payments;
- (p) an analysis of the movements on all reserves during the year;
- (q) for water resources, a statement showing separately, the calculation of (a) the required rate of return (which in sub-paragraphs 1(b)(ii) and (iii) of this schedule is referred to as the cost of capital) and (b) current cost depreciation.

N.B. The version of the accounts direction included in the 1993/94 Annual Report and Accounts contained a number of minor variations in wording from the direction actually agreed:-

1. *The opening sentence of paragraph 2 to the introductory section contained a different word order and structure from the two sentences in the agreed accounts direction.*
2. *In sub-paragraph 1(b)(ii), the word 'mean' should have preceded the reference to 'average of the balance sheet values'.*
3. *In sub-paragraph 1(b)(iii) to Schedule 2, the word 'net' was erroneously added before the references to 'current cost value'.*
4. *The bracketed clause '(which in sub-paragraphs 1(b)(ii) and (iii) of this schedule is referred to as the cost of capital)' should have been included between 'rate of return' and 'and' in paragraph 5(q) to Schedule 2.*

The variations in wording did not effect the Authority's compliance with the accounts direction.



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I. THE AUTHORITY'S BOARD AND HEAD OFFICE MANAGEMENT

BIOGRAPHICAL NOTES ON THE BOARD MEMBERS

LORD CRICKHOWELL, Chairman, age 61

Chairman of NRA since it was established in 1989. Created life peer in 1987; as Nicholas Edwards was MP for Pembroke from 1970-1987 and Secretary of State for Wales from 1979-1987; Director of HTV Group plc, Associated British Ports Holdings plc and other companies; President of University of Wales, Cardiff; Member of the Committee of the Automobile Association.

ED GALLAGHER, Chief Executive, age 50

Chief Executive of NRA since 6 April 1992; Executive with Black and Decker UK, 1971-1981; Director of Business Analysis, Market and Product Development, Black and Decker United States, 1981-1986; from 1986 Divisional Chief Executive and then Managing Director Amersham International; Chartered Engineer; Fellow of the Institution of Electrical Engineers (FIEE); Fellow of the Chartered Institution of Water and Environmental Management (FCIWEM); Fellow of the Royal Society for the Encouragement of Arts Manufacturing and Commerce (FRSA); Member of the Royal Institution; Member of Council, Bristol University; Governor and Visiting Professor, Middlesex University; Trustee of the Living Again Trust.

ROSAMUND BLOMFIELD-SMITH, age 46

J Henry Schroder Wagg & Co Ltd, since 1979, Assistant Director since 1986; Member of Wandsworth Borough Council 1989-1993; Chairman, Accepting Houses Export Finance Committee 1986-1987; Member of London Chamber of Commerce Export Finance Panel 1987-1991; Chairman of the NRA Audit Committee (since March 1995).

PETER BRANDT, age 63 (Retired December 1994)

Chairman of Atkins Fulford Ltd; formerly Chief Executive of Merchant Bankers, William Brandt's Sons & Co Ltd; Chairman of Anglian Regional Advisory Board (until retirement in December 1994).

LADY DIGBY DBE DL, age 61

Member Wessex Water Authority 1983-89; Chairman of Avon & Dorset Customer Consultative Committee 1984-1989; non-executive Director, Western Advisory Board of National Westminster Bank 1986-92; Member of the Council Exeter University; Chairman of the South and West Concerts Board;

President of Council and Board Member Bournemouth Orchestras; Chairman of Southern Regional Advisory Board.

PROFESSOR RON EDWARDS CBE, age 64 (Retired December 1994)

Professor Emeritus, University of Wales; Member Welsh Water Authority 1973-1989; Deputy Chairman 1983-1989; Member Natural Environment Research Council, 1970-1973, and 1980-1983; Chairman National Parks Review Panel 1989-1991; Member of Brecon Beacons National Park Committee; Chairman of the Secretary of State for Wales' Advisory Committee for Wales and Welsh Regional Advisory Board until December 1994.

LORD GREGSON DL Hon F ENG, age 71 (Retired March 1995)

Non-Executive Director of Fairey Group plc and British Steel plc; Vice President of the Association of Metropolitan Authorities since 1984; Pro-Chancellor, Southampton University 1993; Chairman of the NRA Audit Committee (up to retirement in March 1995).

GERALD MANNING, age 57 (Appointed February 1995)

Farmer and businessman since 1965; Member of South West Water Authority 1976-1989; Vice Chairman of Devon National Farmers' Union 1978; Chairman of South West Regional Flood Defence Committee 1989-1995; Chairman of National Association of Flood Defence Committees 1990-1995; Farming and Wildlife Advisory Group Bronze Otter Trophy awarded 1994; Chairman of Anglian Advisory Board since February 1995.

DENNIS MITCHELL CBE, age 64

Member South West Water Authority 1974-1989 and Chairman of its Regional Fisheries Advisory Committee and Environmental Panel; Chairman of Water Authorities' Association National Fisheries Committee from 1983-1989; Group Technical Director of Watts, Blake, Bearne & Co plc; Chairman of the South Western Regional Advisory Board; Chairman of Regional Fisheries Advisory Committee Chairmen.

KAREN MORGAN, age 49

Deputy Chairman, Board of Governors, University of the West of England; Member of Council, Water Aid; Director, Gimlet Business Finance Ltd; Trustee, Bath Festivals Trust; Trustee of Music Space Trust; Chairman, Thames Regional Advisory Board.

JOHN H M NORRIS CBE DL, age 65 (Retired December 1994)

Farms 1,500 acres in Essex; involved in the administration of Flood Defence and Land Drainage in Anglian Water Authority's area from 1971; National President of the Country Landowners Association 1985-1988; Crown Estate Commissioner; Chairman of Thames Regional Advisory Committee until December 1994.

WYNDHAM J ROGERS-COLTMAN OBE, age 62

Arable farmer farming 330 acres near Berwick-on-Tweed; Managing Director of Lowick Farmers Silos Ltd 1969-1990; County Councillor for Berwick North, Northumberland County Council 1985-1993; Chairman of the Country Landowners' Association, Northumberland Branch 1986-1989; Chairman of Northumberland Farming and Wildlife Advisory Group 1987-1990; Minister of Agriculture's Appointee on Northumbria Water Authority Land Drainage Committee 1981-1989; Chairman, Board of Governors, Berwick High School, 1992-to-date; Chairman, Northumbria and Yorkshire Regional Advisory Board.

LEN TAYLOR, age 67 (Appointed February 1995)

Head of Water and Environmental Protection Division, Welsh Office 1982-1987; Water and Environmental Management Consultant 1988-1994; Chartered Engineer; Fellow of the Institution of Civil Engineers; Fellow of the Chartered Institution of Water and Environmental Management; Member of the Institute of Wastes Management; Member of the Welsh Regional Rivers Advisory Committee since 1989, its Chairman from 1992; Member of the Secretary of State for Wales' Advisory Committee since 1992 and its Chairman from February 1995; Chairman of Welsh Regional Advisory Board since February 1995.

R JULIAN F TAYLOR, age 65

Chief Executive, Manchester Ship Canal Company 1980-1987; Director of Ocean Transport and Trading 1964-1980; Chairman, The Groundwork Trust St Helens; Deputy Chairman, Harwich Haven Authority; Polar Medallist; Chairman of North West Regional Advisory Board.

PROFESSOR R KERRY TURNER, age 46

Executive Director of Centre for Social and Economic Research on the Global Environment (CSERGE), School for Environmental Sciences, University of East Anglia and

University College London; Professor of Environmental Economics and Management, University of East Anglia; Fellow of Royal Society of Arts.

RON WESTON, age 69 (Appointed March 1995)

Member Manchester University Council; Treasurer Manchester University Council 1988-1994; Chairman Internal Audit Consortium Manchester & Salford Universities; Member of North West Water Authority 1978-1987; Director Manchester Science Park Ltd, 1988-1994; Retired as Refinery Manager Shell UK Ltd 1983; Chairman of North West Regional Rivers Advisory Committee 1989-1995.

JOHN WHEATLEY CBE, age 67

Director General Sports Council 1983-1988; has worked for Sports Council and its predecessor, Central Council for Physical Recreation, since 1954; Chairman of the Severn-Trent Regional Advisory Board; Chairman National Small-bore Rifle Association; NRA Chief Executive from June 1991-April 1992; Chairman of Severn-Trent Regional Advisory Board.

NRA AUDIT COMMITTEE**Members:**

Lord Gregson (NRA Board) (Chairman of Audit Committee until March 1995)
Mrs R Blomfield-Smith (NRA Board) (Chairman of Audit Committee from March 1995)
Mr P Brandt (NRA Board) (retired December 1994)
Mr W Rogers-Coltman, OBE (NRA Board)
Mr R Weston (NRA Board) (from March 1995)
Mr J Wheatley CBE (NRA Board)

Attendees:

Mr E Gallagher (Chief Executive)
Mr N Reader (Finance Director)
Dr K Bond (Operations Director)
Mr S Egan (Head of Audit)
Mr R Bacon (Coopers & Lybrand)
Mr J Tedder (Coopers & Lybrand)
Mr R Burton (Coopers & Lybrand)

REMUNERATION COMMITTEE**Members:**

Lord Crickhowell (Chairman)
Mrs K Morgan (NRA Board)
Mr D Mitchell, CBE (NRA Board)

APPENDICES

Lord Gregson (NRA Board) until March 1995
Mr J Taylor (NRA Board)
Mr R Weston (NRA Board) from March 1995

Attendees:

Mr E Gallagher (Chief Executive)
Mr P Humphreys (Personnel Director)
Dr K Bond (Director of Operations)

PENSIONS COMMITTEE

Lord Crickhowell (Chairman)
Mr G Billington (Member Representative)
Mr P Brandt (Board Member) until December 1994
Mr E Gallagher (Chief Executive)
Mr P Humphreys (Director of Personnel)
Mrs K Morgan (Board Member)
Mr K Newham (Pensioner Representative)
Mr N Reader (Director of Finance)
Mrs E Stormont (Member Representative) until March 1995
Mr L Taylor (Board Member) from April 1995
Mrs S Timbrell (Pension Fund Manager)
Mr D White (Member Representative)
Mr M Wragg (Member Representative)
Mrs H Carrick (Member Representative) from April 1995
Mr R Herbert (Independent Adviser)
Mr J Tigue (Independent Adviser)

HEAD OFFICE DIRECTORS AND HEADS OF FUNCTION (as at 31 March 1995)

Chief Executive's Office

Mr S Egan (Head of Internal Audit)

Water Management and Science Directorate

Dr C J Swinnerton (Director of Water Management)
Mr B Utteridge (Head of Flood Defence)
Mr M E Bramley (Head of Research and Development)
Mr P Chave (Head of Water Quality)
Mr D Jordan (Head of Fisheries, Recreation, Conservation and Navigation)
Mr J Seager (Head of Environmental Quality)
Mr J D Sherriff (Head of Water Resources)
Dr J Pentreath (NRA Chief Scientist and Director of Water Quality, seconded to DoE in January 1994.)

Personnel Directorate

Mr P J Humphreys (Personnel Director, seconded to EAAC)
Mr I L Graham (Head of Employee Relations, Acting Director of Personnel)
Mr P Parkinson (Head of Health & Safety)
Mr R Skipp (Training and Development Manager)
Mr M D Usher-Clark (Head Office Personnel Manager)

Finance Directorate

Mr N Reader (Finance Director)
Mr R Gall (Head of Financial Management)
Mr L F Gray (Head of IAS Development)
Mr H G Pearce (Head of Corporate Planning)
Mrs S Timbrell (Pension Fund Manager)
Mr M Yeomans (Head of Procurement)

Operations Directorate

Dr K Bond (Director of Operations)
Mr W J Forbes (Operations Coordinator)
Mr J Ashworth (Head of Systems Development)

Legal Services Directorate and Secretariat

Mr C F Martin (Secretary and Director of Legal Services)
Mr D Dent (Head of Estates Management)
Mrs A Hall (Head of Committee Services)
Ms H Aldridge (Head Office Solicitor)

Market Testing Directorate

Dr G Mance (Director of Market Testing)
Ms G Griffith (Environment Agency Coordinator)

Public Affairs Directorate

Mr M W Wilson (Director of Public Affairs)
Ms E F O'Donnell (Head of Media & External Affairs)
Ms J M Jupe (Head of Corporate Communications)

II. REGIONAL OFFICES AND REGIONAL COMMITTEES

This Appendix lists the addresses of the regional offices and the members of the three statutory Regional Committees in each of the NRA's eight regions at March 31st 1995. Note that the two regions recently re-organised each have six Regional Committees.

Members of the Regional Rivers Advisory Committees and the Regional Fisheries Advisory Committees are appointed by the NRA. Members of the Regional Flood Defence Committees are appointed by local authorities, and the Minister for Agriculture, Fisheries and Food or the

Secretary of State for Wales as appropriate, and the NRA.

Each Committee is represented on the other two Committees in the region, usually by the Chairman.

The Regional General Manager in each region is advised by the Regional Board Member and the Chairmen of the three statutory Regional Committees.

The Committees' terms of reference to report annually to the Authority have been fulfilled through reports in end of year Regional Reviews used to compile this Annual Report.

ANGLIAN REGION

Regional Office Address
Kingfisher House
Goldhay Way
Orton Goldhay
Peterborough
PE2 5ZR
Tel: (01733) 371811
Fax: (01733) 231840

Regional General Manager
Mr G Davies

Regional Board Member
Mr P Brandt (until December '94)
Mr G Manning (from February '95)

Fisheries Advisory Committee
Mr K Pettican (Chairman)
Mr S Alden
Mr S Amos
Mr K Ball
Mr C Clare
Mr M Foster
Mr A Gammell
Mr C Groome
Mr D Lloyd
Mr J Martin
Mr A Rawlings
Mr A Wheeler
Mr T Wilson

Flood Defence Committee
Mr J Martin (Chairman) CBE
Mr J Childs
Mr D Cowie
Mr T Dale
Mr H Duffield
Mr J Ellis
Mr R Epton
Mr D Fisher
Mr B Goble
Mr C Groome
Mr J Horrell CBE
Ms J Madgwick
Mrs S Marler

Mr C Mole
Mr R Payne
Mr J Plant
Mr D Riddington OBE
Mr R C Rockcliffe
Mr W H Squier

Rivers Advisory Committee
Mr C Groome (Chairman)
Mrs S Ashford
Mr R Bennett
Ms I Floering-Blackman
Mr R Burgin
Dr T Coles
Mr A Colston
Hon R Godber
Mr B Green
Mr R Hardman
Mr B Isaacs
Mr C Jeffries
Mr D King
Mr J Martin
Mr R Murfitt
Dr R Price
Dr D Simpson
Mr C Stratton
Mr R Watts
Mr K Weatherhead

NORTHUMBRIA & YORKSHIRE REGION

Regional Office Address
Rivers House
21 Park Square South
Leeds
LS1 2QG
Tel: (0113) 2440191
Fax: (0113) 2461889

Regional General Manager
Mr R Hyde

Regional Board Member
Mr W Rogers-Coltman OBE

Northumbria Fisheries Advisory Committee
Mr P L Tennant (Chairman)

Mr H Becker
Mr J Browne-Swinburne
Dr D T Crisp
Mrs M Dickinson
Mr J P Hackney
Dr S Haile
Mr D Heselton
Mr K Hewitson
Mr R Kirton-Darling
Lord Ralph Percy
Mr W Rogers-Coltman
OBE (ex officio)
Dr C Spray
Mr D Stafford
Mr R J Trees
Mr C T Warwick
Mr K Young

Northumbria Flood Defence Committee
Mr J P Hackney (Chairman)
Cllr D Bates
Mr J Browne-Swinburne
Cllr R Dunn
Cllr Dr G H Fisher
Cllr I Galbraith
Cllr F Gill
Mr J P Hall
Cllr G Houchen
Mr R S P Howell
Hon A H Joicey
Mrs A Lough
Cllr G Spring
Mr D G H Stewart
Cllr R Stidolph
Mr P L Tennant
Cllr E N Walker

Northumbria Rivers Advisory Committee
Mr J Browne-Swinburne (Chairman)
Mr J P P Anderson
Cllr J Coulthard
Mr D Dunlop
Mr J P Hackney
Mr K Hale
Mr M Gardner
Mr W K Mason

Mr F Miller
Prof M D Newson
Cllr D L Nicholson
Mr J Ogilvie
Mr R A Pepper
Dr C Price
Mr W Rogers-Coltman
OBE (ex officio)
Mr P L Tennant
Cllr Mrs M Thomas

Yorkshire Fisheries Advisory Committee
Mr J A Fawcett (Chairman)
Mr J Austerfield
Mr T D Collier
Mr G Copley
Mr A R Dalby
Mr A Evans
Mr P Hayton
Mr E Howard-Vyse
Mr W Jackson
Mr H G Mackrill
Mr J H Mitchell
Mr M O'Donnell
Mr W J Rogers-Coltman
OBE (ex officio)
Mr M E Stewart
Mr G H Traves
Mr J W Whitworth

Yorkshire Flood Defence Committee
Mr T D Collier (Chairman)
Cllr J Bradley
Mrs J M Burnett
Mr B R Croft
Mr J A Fawcett
Cllr J Goodhand
Cllr R G Heseltine
Cllr P A Kirk
Cllr C Martin
Cllr Mrs E Smith
Mr J R Welford
Mr J W Whitworth

Yorkshire Rivers Advisory Committee
Mr J W Whitworth (Chairman)
Mr J S Armitage
Mr I Carstairs
Mr R D Clarke
Mr T D Collier
Mr J C Cooke
Mr J A Fawcett
Cllr R J Garbutt
Mr W F Kirtley
Dr P Kneale
Mr J Lunn
Ms S Marsden
Mr R I Pigg
Mr W J Rogers-Coltman
OBE (ex officio)
Dr A J Shuttleworth
Cllr D J Tarlo
Mr J N Thompson
Mr I A White
Mr G A Wilford

NORTH WEST REGION

Regional Office Address
Richard Fairclough House
Knutsford Road
Warrington
WA4 1HG
Tel: (01925) 653999
Fax: (01925) 415961

Regional General Manager
Dr C Harpley

Regional Board Member
Mr R J F Taylor

Fisheries Advisory Committee
Mr J Carr (Chairman)
Mr D Bridgewood
Mr A Brown
Mr J Castle
Mr T Glover
Mr S Griffiths
Mr B Irving

APPENDICES

Mr K Lambert
Mr R Langley
Mr E Le Cren
Mr S Payne
Mr A Smith
Mr K Spencer
Mr R Tinkler
Mr W Wannop OBE
Mr R Weston
Mr H Whittam

Flood Defence Committee

Mr W Wannop OBE
(Chairman)
Mr R Addison
Mr J DeAsha
Mr K Bury CBE
Mr J Carr
Mr S Cassidy*
Mr F Dolphin
Mr P Entwistle
Mr D Evans*
Mr P Fisher*
Mr S Hill
Mr J Hilton
Mrs E Kelly
Prof M MacKeith
Mr B O'Hare
Mr P Phizacklea*
Mr G Roper
Mr B Wallsworth
Mr R Weston
* Deputy Members

Rivers Advisory Committee

Mr R Weston (Chairman)
Mr B Alexander
Mr C Bagot
Mr P Barton
Mr M Berry
Mr I Brodie
Mr C Burford MBE
Mr J Carr
Dr A Crowther
Mr G Doughty
Mr T Featherstonhaugh
Dr P Glading
Mr G Hammersley
Mr E Harper
Prof S Jones
Mr J Lucas
Dr P Roberts
Mr R Sharland
Mrs E Smith OBE
Mr W Wannop OBE

SEVERN-TRENT REGION

Regional Office Address

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

Regional General Manager

Mr D N Rainbow

Regional Board Member

Mr J Wheatley CBE

Fisheries Advisory Committee

Mr F A Jennings
(Chairman)
Mr G Ayres
Mr R Baker
Dr P E Bottomley
Mr G B Chambers
Mr J Dainty OBE
Mr K Fisher
Lord Guernsey
Mr K A Haines
Mr N Head
Mr A R Jones
Mr P F Kavanagh
Mr D H Morgan
Dr A Richards
Mr R Sparrow
Dr T H Y Tebbutt
Mr R N E Walsh
Mr R C P Williams

Flood Defence Committee

Mr J Dainty OBE
(Chairman)
Cllr B G Booth
Cllr J Carter
Mr D Chapman
Cllr W P Cody
Cllr M J Davey
Mrs J F R Davies
Cllr D Featherstone
Mr A J L Fraser
Cllr J W Griffiths
Mr J R Hammond
Mr F A Jennings
Cllr P F Kellie MBE
Cllr R G Littleboy
Cllr G S Manku
Mr J G Markwick
Mr M R Prosser
Cllr M Ryan
Mr T J Sobey
Dr T H Y Tebbutt
Cllr J Wardle MBE JP

Rivers Advisory Committee

Dr T H Y Tebbutt
(Chairman)
Dr R A Breach
Mr J Dainty OBE
Cllr Mrs G Ferguson
Cllr Mrs S Foster
Mrs V A Gillespie MBE
Mr D C Grigg
Mr F A Jennings
Cllr D R Jones
Mr M July
Mr T McAllister

Cllr Mrs P R Merritt
Mr P J Mitchell
Dr G B Parr
Mr D Pryor
Mr J A Thompson
Mr J Tucker
Mr F Walmsley
Mr M White

SOUTHERN REGION

Regional Office Address

Guilddbourne House
Chatsworth Road
Worthing
West Sussex
BN11 1LD
Tel: (01903) 820692
Fax: (01903) 821832

Regional General Manager

Mr K Whiteman

Regional Board Member

Mrs K Morgan (until February '95)
Lady Digby DBE DL (from March '95)

Fisheries Advisory Committee

Mr A Humbert (until August '94)
Dr N Giles
(Chairman) (from September '94)
Mr P Cockwill
Mr A Costen
Mr M Drummond
Mr J Ferguson
Mr A Hodges
Dr B Lindsey
Mr C Neame (until June '94)
Mr D G L Monnington
(from July '94)
Mr D Owen
Mr J Parkman
Mr F Reader
Mr G Robinson (from November '94)
Maj J Thomas
Mr A Williams

Flood Defence Committee

Mr C Neame (until June '94)
Mr D G L Monnington
(Chairman) (from July '94)
Dr T Bines (until June '94)
Dr R P Bond
Mr R Cowley
Dr R M Crabtree (from July '94)
Mr M Drummond
Dr N Giles (from September '94)

Mr D Greenwood (from July '94)
Mr I Hammond (until June '94)
Mr A Humbert (until August '94)
Mr A Lee (from July '94)
Mr S Leyland
Mr R Millard
Mr D G L Monnington
(until June '94 to take Chair)
Mrs A H Moore
Mr M Odling
Mr A A Ogden
Mr H Richards
Mr T Sobey (until June '94)
Mr C Tandy
Mr M Tapp (from July '94)
Mr G D Thomsett

Rivers Advisory Committee

Mr M Drummond
(Chairman)
Mr H Barnhoorn
Mr W Cutting
Dr M Clarke
Mr C Dempster
Maj I Duffin
Mr D Gibson
Dr N Giles (from September '94)
Mr D Harvey
Mrs E Haselden
Mr A Humbert (until August '94)
Ms L Leeson
Mr D Martin
Ms L Matson
Mr D G L Monnington
(from July '94)
Mr C Neame (until June '94)
Mr E Pipe
Mr C Saunders-Davies
Mr E Shilling
Mr B Tarling (until March '95)
Mrs S Whitley
Mr J Wilkinson

SOUTH WESTERN REGION

Regional Office Address

Manley House
Kestrel Way
Sowton
Exeter
EX2 7LQ
Tel: (01392) 444000
Fax: (01392) 444238

Regional General Manager

Mrs K Bryan

Regional Board Members

Mr D Mitchell CBE
Lady Digby DBE DL (until Feb '95)

South West Fisheries Advisory Committee

Mrs A Voss-Bark
(Chairman)
Lt Col G P Badham (until August '94)
Mr B S Burrows
Lord Clinton
Mr S Day
Mr P D Edwards
Mr S J Gardiner (from September '94)
Mr P Gompertz
Mr O Gilbert
Prof C Kennedy
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Mr M Mountjoy
Mr J Muirhead (until August '94)
Mr T Mutton (until August '94)
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Mr R Retailick
Mr M J Stanbury (from February '95)
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THAMES REGION**Regional Office Address**

Kings Meadow House
Kings Meadow Road
Reading
RD1 8DQ
Tel: (01734) 535000
Fax: (01734) 500388

Regional General Manager

Mr L Jones

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(until December '94)
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WILSH REGION**Regional Office Address**

Rivers House/Plas-yr-Afon
St Mellons Business Park
St Mellons
Cardiff
CF3 0LT
Tel: (01222) 770088
Fax: (01222) 798555

Regional General Manager

Dr J H Stoner

Regional Board Member

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Coopers & Lybrand
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W Yorks LS1 3DQ

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McKenna & Co
Mitre House
160 Aldergate Street
London EC1A 4DD

IV. NEW LEGISLATION, BYELAWS AND OTHER STATUTORY INSTRUMENTS AFFECTING THE NRA

EC DIRECTIVES

94/24/EC(8 June 1994)

Amending Annex II to Directive 79/409/EEC on the conservation of wild birds

94/31/EC(27 June 1994)

Amending Directive 91/689/EEC on hazardous waste

UK LEGISLATION

Coal Industry Act 1994

Deregulation and Contracting Out Act 1994

Land Drainage Act 1994

Statutory Sick Pay Act 1994

Trade Mark Act 1994

Environment Bill

1994

November Bill announced in Queen's Speech

1 December House of Lords First Reading

15 December House of Lords Second Reading

1995

17/19/26/31 January

2/9 February Lords Committee Stage

2/7/9 March Lords Report Stage

20 March Lords Third Reading

Commons Recess

18 April First/Second Reading in Commons

27 April - 15 June Commons Committee Stage

June Commons Report Stage

Third Reading in Commons

July Lords consideration of Commons amendments.

Commons further consideration of the Bill (if Lords have re-amended it)

July Royal Assent

Late July - mid October

Summer recess

If the Bill does not received Royal Assent before the Summer Recess, the final stages may be taken in October.

BYELAWS

Welsh Region

(i) Supplementary set of rod and line byelaws (No's. 1,2 and 4) prohibiting fishing by any means for salmon and migratory trout in the River Conwy and its tributaries upstream of the confluence of the Afon Machno and the River Conwy. Confirmed by the Welsh Office on 26/05/94 and came into force on 01/06/94.

(ii) Byelaws regulating fishing by means of a rod and line; namely byelaw 3 of the supplementary set approved in (i) above relating to the use of lures and baits with rod and line on the River Wye and its tributaries upstream of the Broughroad/Llysen Road Bridge and byelaw 13 relating to fishing near obstructions. Confirmed by the Welsh Office on 29/07/94 and became effective on 01/08/94.

(iii) Rod and line byelaws No's. 2(d), 3 - 12, 14 - 17. Confirmed with modifications by the Welsh Office on 01/09/94 and became effective from 01/01/95.

(iv) Amendments to byelaws in respect of commercial fishing for salmon and migratory trout. Specific amendment to byelaw 3 made in respect of the annual close season for salmon and migratory trout - nets and fixed engines. Confirmed by the Welsh Office on 24/10/94 and became effective on 01/01/95.

Northumbria & Yorkshire

(i) Comprehensive set of byelaws containing miscellaneous provisions made under the Salmon and Freshwater Fisheries Act 1975 and the Water Resources Act 1991, including: the specification/use and marking of nets, catch returns for licensed nets and eel traps, prohibitions regarding certain instruments and netting at night and details of the close season. A number of byelaws were also revoked. Confirmed on 21/02/95, coming into force on 26/03/95.

APPENDICES

STATUTORY INSTRUMENTS

Statutory Instrument Number	Description	Made	Coming Into Force			
130	Local Government, England & Wales (Changes in Local Government Areas) The Cardiff and Vale of Glamorgan (Areas) Order 1994	26/01/94	01/04/94	921	The Environmentally Sensitive Areas (Clun) Designation (Amendment) Order 1994	24/03/94 30/04/94
245	The National Rivers Authority (Severn Trent and Anglian Regional Flood Defence Committees Areas) (Boundaries) Order 1994	01/02/94	01/04/94	922	The Environmentally Sensitive Areas (North Peak) Designation (Amendment) Order 1994	24/03/94 30/04/94
522	The Environmental Protection (Waste Recycling Payments)(Amendments) Regulations 1994	01/03/94	01/04/94	923	The Environmentally Sensitive Areas (Breckland) Designation (Amendment) Order 1994	24/03/94 30/04/94
677	The Town and Country Planning (Assessment of Environmental Effects) (Amendment) Regulations 1994	09/03/94	08/04/94	924	The Environmentally Sensitive Areas (South Wessex Downs) (Amendment) Order 1994	24/03/94 30/04/94
678	The Town and Country Planning General Development (Amendment) Order 1994	09/03/94	08/04/94	925	The Environmentally Sensitive Areas (Lake District) Designation (Amendment) Order 1994	24/03/94 30/04/94
707	The Environmentally Sensitive Areas (Blackdown Hills) Designation Order 1994	03/03/94	06/04/94	926	The Environmentally Sensitive Areas (South West Peak) Designation (Amendment) Order 1994	24/03/94 30/04/94
708	The Environmentally Sensitive Areas (Cotswold Hills) Designation Order 1994	03/03/94	06/04/94	927	The Environmentally Sensitive Areas (Avon Valley) Designation (Amendment) Order 1994	24/03/94 30/04/94
709	The Environmentally Sensitive Areas (Shropshire Hills) Designation Order 1994	03/03/94	06/04/94	928	The Environmentally Sensitive Areas (Exmoor) Designation (Amendment) Order 1994	24/03/94 30/04/94
710	The Environmentally Sensitive Areas (Dartmoor) Designation Order 1994	03/03/94	06/04/94	929	The Environmentally Sensitive Areas (The Broads) Designation (Amendment) No.2 Order 1994	24/03/94 30/04/94
711	The Environmentally Sensitive Areas (Essex Coast) Designation Order 1994	03/03/94	06/04/94	930	The Environmentally Sensitive Areas (Pennine Dales) Designation (Amendment) No.2 Order 1994	24/03/94 30/04/94
712	The Environmentally Sensitive Areas (Upper Thames Tributaries) Designation Order 1994	03/03/94	06/04/94	931	The Environmentally Sensitive Areas (South Downs) Designation (Amendment) No.2 Order 1994	24/03/94 30/04/94
724	The Town and Country Planning (Use Classes) (Amendment) Order 1994	14/03/94	04/04/94	932	The Environmentally Sensitive Areas (Somerset Levels and Moors) Designation (Amendment) No.2 Order 1994	24/03/94 30/04/94
918	The Environmentally Sensitive Areas (North Kent Marshes) Designation (Amendment) Order 1994	24/03/94	30/04/94	933	The Environmentally Sensitive Areas (West Penrith) Designation Order (Amendment) No.2 Order 1994	24/03/94 30/04/94
919	The Environmentally Sensitive Areas (Test Valley) Designation (Amendment) Order 1994	24/03/94	30/04/94	1057	The Surface Waters (Rivers Ecosystem) (Classification) Regulations 1994	12/04/94 10/05/94
920	The Environmentally Sensitive Areas (Suffolk River Valleys) Designation (Amendment) Order 1994	24/03/94	30/04/94	1096	The Environmental Protection Act 1990 (Commencement No.15) Order 1994	14/04/94 14/04/94
				1137	The Transfrontier Shipment of Waste Regulations 1994	22/04/94 06/05/94
				1291	The Habitat (Water Fringe) Regulations 1994	12/05/94 06/06/94
				1292	The Habitat (Former Set-Aside Land) Regulations 1994	12/05/94 06/06/94

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1293	The Habitat (Salt-Marsh) Regulations 1994	12/05/94	06/06/94	2716	The Conservation (Natural Habitats,&c.) Regulations 1994	20/10/94	30/10/94
1329	The Environmental Protection (Prescribed Processes and substances etc.) (Amendment) No.2 Regulations 1994	17/05/94	01/06/94	2841	The Urban Waste Water Treatment (England & Wales) Regulations 1994	04/11/94	30/11/94
1411	The Reconstitution of the Langport District Drainage Board Order 1994	30/03/94	23/05/94	2847	The Environmental Protection (Authorization of Processes) (Determination Periods) (Amendment) Order 1994	06/11/94	01/12/94
1448	The Fish Health (Amendment) Regulations 1994	26/05/94	01/07/94	2851	Reconstitution of the Buckingham Internal Drainage Board Order 1994	05/09/94	01/11/94
1729	The Nitrate Sensitive Areas Regulations 1994	01/07/94	26/07/94	2854	The Environmental Protection Act 1990 (Commencement No.16) Order 1994	06/11/94	06/11/94
1751	The Protected Rights (Transfer Payment) Amendment Regulations 1994	04/07/94	29/07/94	3002	The Farm and Conservation Grant (Variation) No.2 Scheme 1994	25/11/94	30/11/94
1806	The Notification of Existing Substances (Enforcement) Regulations 1994	30/06/94	29/07/94	3003	The Farm and Conservation Grant (Amendment) Regulations 1994	25/11/94	30/11/94
1850	The Building Regulations (Amendment) Regulations 1994	12/07/94	01/09/94 & 01/10/94	3037	The Deregulation and Contracting Out Act 1994 (Commencement No.1) Order 1994	28/11/94	28/11/94
1989	The Environmentally Sensitive Areas Designation (Radnor) (Welsh Language Provisions) Order 1994	21/07/94	01/09/94	3062	The Doncaster Area Drainage Act 1929 (Amendment) Order 1994	01/12/94	24/12/94
1990	The Environmentally Sensitive Areas Designation (Ynys Mons) (Welsh Language Provisions) Order 1994	21/07/94	01/09/94	3063	The Coal Industry Act 1994 (Commencement No.3) Order 1994	01/12/94	01/12/94
2085	The Merchant Shipping (Prevention of Oil Pollution) (Amendment) Regulations 1994	04/08/94	01/09/94	3064	The Coal Mining Subsidence (Land Drainage) Regulations 1994	30/11/94	24/12/94
2329	The Thames Estuary Cockle Fishery Order 1994	05/09/94	28/09/94	3065	The Aire and Calder Navigation Act 1992 (Amendment) Order 1994	01/12/94	24/12/94
2349	The Countryside Access Regulations 1994	05/09/94	29/09/94	3081	The Coal Industry Act 1994 (Consequential Modifications of Local Acts) Order 1994	03/12/94	27/12/94
2487	The Environmental Protection Act 1990 (Commencement No.15) (Amendment) Order 1994	19/09/94	19/09/94	3099	The Habitat (Broadleaved Woodland) (Wales) Regulations 1994	12/12/94	09/01/94
2552	The Coal Industry Act 1994 (Commencement No.2 and Transitional Provision) Order 1994	29/09/94	31/10/94	3100	The Habitat (Water Fringe) (Wales) Regulations 1994	12/12/94	09/01/95
2553	The Coal Industry (Restructuring Date) Order 1994	29/09/94	29/09/94	3101	The Habitat (Coastal Belt) (Wales) Regulations 1994	12/12/94	09/01/95
2562	The Coal Industry (Retained Copyhold Interests) Regulations 1994	03/10/94	31/10/94	3102	The Habitat (Species-Rich Grassland) (Wales) Regulations 1994	12/12/94	09/01/95
2567	The Coal Industry Act 1994 (Consequential Modifications of Subordinate Legislation) Order 1994	03/10/94	31/10/94	3132	The Insurance Companies (Amendment) Regulations 1994	07/12/94	30/12/94
2595	The Town and Country General Development (Amendment) No.2 Order 1994	06/10/94	31/10/94	3188	The Deregulation and Contracting Out Act 1994 (Commencement No.2) Order 1994	09/12/94	09/12/94
				3234	The Environmental Protection Act 1990 (Commencement No.15) (Amendment No.2) Order 1994	06/12/94	06/12/94
				3302	North West Sutherland Protection Order	15/03/95	

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79	Hartlepoons Water Company (Constitution and Regulation) Order 1995	14/02/95
150	Financial Assistance for Environmental Purposes Order 1995	15/02/95
189	Environmentally Sensitive Areas (North Peak) Designation (Amendment) Order 1995	27/01/95 28/02/95
190	Environmentally Sensitive Areas (Clun) Designation (Amendment) Order 1995	27/01/95 28/02/95
191	Environmentally Sensitive Areas (Test Valley) Designation (Amendment) Order 1995	27/01/95 28/02/95
192	Environmentally Sensitive Areas (South West Peak) Designation (Amendment) Order 1995	27/01/95 28/02/95
193	Environmentally Sensitive Areas (Lake District) Designation (Amendment) Order 1995	27/01/95 28/02/95
194	Environmentally Sensitive Areas (Suffolk River Valleys) Designation (Amendment) Order 1995	27/01/95 28/02/95
195	Environmentally Sensitive Areas (Exmoor) Designation (Amendment) Order 1995	27/01/95 28/01/95
196	Environmentally Sensitive Areas (South Wessex Downs) Designation (Amendment) Order 1995	27/01/05 28/02/95
197	Environmentally Sensitive Areas (Avon Valley) Designation (Amendment) Order 1995	27/01/95 28/02/95
198	Environmentally Sensitive Areas (Breckland) Designation (Amendment) Order 1995	27/01/95 28/02/95
199	Environmentally Sensitive Areas (North Kent Marshes) Designation (Amendment) Order 1995	27/01/95 28/02/95
200	Environmentally Sensitive Areas (Cotswold Hills) Designation (Amendment) Order 1995	27/01/95 28/02/95
201	Public Supply Contracts Regulations 1995	21/02/95
304	Genetically Modified Organisms (Deliberate Release) Regulations 1995	08/03/95

V. CORPORATE PUBLICATIONS AND PUBLICITY MATERIAL

The following publications are available from
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NRA Corporate Strategy
NRA Water Quality Strategy
NRA Water Resources Strategy
NRA Flood Defence Strategy
NRA Fisheries Strategy
NRA Recreation Strategy
NRA Conservation Strategy
NRA Navigation Strategy
NRA R&D Strategy
NRA Corporate Plan & Summary Leaflet 1995/96
NRA Customer Charter
Annual Review & Summary Accounts 1993/94
Annual Conservation Access and Recreation Report

Leaflets

A Guide to Information Available to the Public
Information for river canoeists
Oil Care Code
Oil Care at work
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Oil Care on your boat
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APPENDICES

Sea Trout in England and Wales
ISBN 0 11 885814 9 £6.00
Sea Trout Literature Review and Bibliography
ISBN 0 11 885816 5 £6.00
Status of Rare Fish
ISBN 0 11 886511 0 £8.00
Toxic Blue-Green Algae
ISBN 0 11 885804 1 £15.00
Water Pollution Incidents in England and Wales - 1993
ISBN 0 11 886512 9 £5.50
Water Pollution Incidents in England and Wales - 1992
ISBN 0 11 885813 0 £4.50
Water Pollution Incidents in England and Wales - 1991
ISBN 0 11 885809 2 £4.00
Water: Nature's Precious Resource
ISBN 0 11 886523 4 £22.50

Other publications available from regional offices:

ANGLIAN

Catchment Management Plans

Ely/Ouse Catchment Management Plan, Consultation Report, Summary and Action Plan.
Gipping/Stour Catchment Management Plan, Consultation Report, Summary and Action Plan
Louth Coastal Catchment Management Plan, Consultation Report, Summary and Action Plan
The River Cam Catchment Management Plan, Consultation Report, Summary and Action Plan
Lower Nene Catchment Management Plan, Consultation Report, Summary and Action Plan
Yare Catchment Management Plan, Consultation Report, Summary and Action Plan
Upper Nene Catchment Management Plan, Consultation Report, Summary and Action Plan
Bedford Ouse Catchment Management Plan, Consultation Report, Summary and Action Plan
Blackwater Catchment Management Plan, Consultation Report and Summary.
Grimsby Catchment Management Plan, Consultation Report and Summary
North West Norfolk Catchment Management Plan, Consultation Report and Summary
Humber Estuary Catchment Management Plan, Consultation Report and Summary (Joint with Northumbria & Yorkshire and Severn Trent).

Leaflets

Information Wallet Folder
24 Hours a Day
Directory of Addresses
Protecting the Water Environment
The Anglian Region/Facts at a Glance
Contacting the NRA
Authority Consents
Development in Flood Risk Areas
Tide Tables Volume 1 - Lincolnshire and Humberside
Tide Tables Volume 2 - Norfolk, Suffolk and Essex
Protecting and Improving the Water
Fisheries Byelaws
The Denver Complex/The Ely Ouse Essex
Jaywick Sea Defence Scheme
Happisburgh to Winterton Sea Defences
Hunstanton and Heacham Sea Defences
Thames Tidal Defences
The Colne Barrier
Ipswich Flood Defences
Ouse Washes Barrier Banks Improvements
Woodbridge and Melton Flood Defences
Aldeburgh Sea Defences

Kings Lynn Tidal Defences
Sea Defence Management Study
Battling the Tide - Flood Defences in Anglian Region
East Anglian Salt Marshes
Broadland Flood Alleviation Strategy
A guide to flood warnings in Lincolnshire
Building a Beach (Lincshire)
Rebuilding the Anglian Coastline Folder (Lincshire)
The Lincshire Project Folder
Offshore Dredging Applying for a Licence
Offshore Dredging Safeguard the Environment
Welland and Glen River Systems
The 1953 East Coast Floods
Water Resources - Abstraction Register
Drought in Anglia - Autumn 1992
Managing Water Resources
Water in the Thetford Area
Water Resources in Anglia Summary Document 1994
Lodes-Granta Groundwater Scheme
Cley Sea Defences
Monitoring the Coast for Sea Defences.
Farm Pollution - The Safe Way with Silage
Blue-Green Algae
Water Pollution - Causes and Control
River Pollution and How to Avoid It
Pollution from your Home - and how to avoid it
Water Quality - Discharge Consents
Water Quality - Marine Monitoring
Chlorinated Solvents and Water
Waterways - A Code of Conduct
Roy of the Rivers
Navigation in the Anglian Region
Map - Navigation in the Anglian Region
Navigation Notes - Advice to Boat Owners
Navigation - The Anglian Experience
Guide to Fishing Clubs - Great Ouse, Cam and Fenland Waters
Guide to Freshwater Fishing in Norfolk and Suffolk
Guide to Fishing Clubs - Northern Area
A Brief History of the River Stour Navigation - 1705 to Present Day
River Nene Navigation Guide
The Great Ouse Fact File
Land Drainage and Flood Defence Byelaws
Flood Protection at Felixstowe
Conservation in the Anglian Region
The Drought of 1988-1992 in Anglia
1994/95 Regional Plan Summary
Ouse Washes Summer Flood Control
Emergency Arrangements
Catchment Management Plans
Rivers Environmental Database System
Coastal Wildlife Survey
River Lark Fact File
River Cam Fact File
0800 flier
0800 car stickers

Videos

Water carers - An Educational Video
Liquid Asset - Water Resources
Pollution Prevention Pays

Posters

Water Resources
NRA (Anglian Region) Colouring Chart
NRA Educational Wallchart Wildlife on the Riverbank

NORTHUMBRIA & YORKSHIRE

Catchment Management Plans

Derwent Consultation Report and Action Plan
 Aire Consultation Report and Action Plan
 Calder Consultation Report and Action Plan
 Aln Consultation Report
 Blythe Consultation Report
 Coquet Consultation Report and Action Plan
 Don, Rother and Dearne Consultation Report
 Esk and Coastal Streams Consultation Report and Action Plan
 Humber Estuary Consultation Report
 Nidd and Wharfe Consultation Report and Action Plan
 River Hull and Coast Consultation Report
 Swale, Ure and Ouse Consultation Report and Action Plan
 Tees Consultation Report and Action Plan
 Tyne Consultation Report and Action Plan
 Wansbeck Consultation Report
 Wear Consultation Report and Action Plan

Brochures

Emergency Arrangements
 Conservation
 Water Resources
 Flood Defence
 River Quality Management
 Weather Radar and Flood Warning Services
 Humber Environment
 Humber Estuary
 Barmby Barrage Amenity Site
 Understanding Riverbank Erosion
 Flood Defence in York
 The Yarm Flood Defence Scheme
 High Eske Nature Reserve
 Making Waves - strategy initiative of Tyne & Wear Watersports
 Development Project
 Yorkshire River Litter Monitoring Project
 Sea Defence Survey
 Managing the Drought and Water Resources
 River Model
 Water Abstraction New Licensing Procedures
 Water Quality Objectives
 Landfill and the Water Environment
 Opportunities for Graduates
 Section 42 - Fisheries Contributions
 Internal Environmental Policy
 Yarm at Risk
 Wylam Salmon Mortalities
 River Quality Schemes
 Your Guide to Who's Who in the National Rivers Authority -
 Dales Area - Northumbria and Yorkshire Area - Northumbria Area -
 Southern Yorkshire Area
 Think Water - Keep it Clean
 A New Approach in Caring for the Environment
 Guardians of the Water Environment - English - French - German
 Water Resources in Northumbria and Yorkshire Region
 Regional Water Resources Strategy
 Low Flows and Water Resources
 Guidance Plans for Local Planning Authorities on the Methods of
 Protecting the Water Environment through Development Plans
 NRA Education Resources - Pack
 Sources (secondary school) - Issue 1 - River Catchments
 Status of Rare Fish
 Disposal of Sheep Dip Waste - effects on water quality
 River Landscape Assessment
 Policy and Practice for the Protection of Groundwater - Regional
 Appendix - Yorkshire Region
 The River Aire - Conservation Within the Catchment
 PPG1 - General Guide to the Prevention of Pollution of Controlled Waters

PPG2 - Above Ground Oil Storage Tanks
 PPG3 - The Use and Design of Oil Separators in Surface Water
 Drainage System
 PPG4 - Disposal of Sewage Where No Mains Drainage is Available
 PPG5 - Works in, Near or Liable to Affect Watercourses
 PPG6 - Working at Demolition and Construction Sites
 PPG7 - Fuelling Stations: Construction and Operation
 PPG8 - Safe Storage and Disposal of User Oils
 PPG9 - The Prevention of Pollution of Controlled Waters by Pesticides
 PPG10 - Pollution from Highway Depots
 PPG11 - Preventing Pollution on Industrial Sites
 PPG12 - The Prevention of Pollution of Controlled Waters by Sheep Dip
 PPG13 - Guidance Note on the use of High Pressure Water and
 Steam Cleaners
 PPG14 - Inland Waterways: Marinas and Craft
 PPG16 - Schools and Educational Establishments
 PPG17 - Dairies and Other Milk Handling Operations

Leaflets

Esk
 Derwent
 Wharfe
 Don Dearne
 Aire
 Calder
 Humber Estuary
 Tees
 Tyne
 Water Guardian February/March 1995
 Water Quality Public Register
 The Control of Pollution - Regulations 1991 (for farmers)
 Water Wisdom
 River Canoeists
 Blue-Green Algae
 Marine algae
 A Guide to Identifying Freshwater Crayfish in Britain & Ireland
 Salmon Hatchery - Kielder, Northumberland
 Safeguard the Environment - A Guide for Developers
 Bathing Water Quality
 Partnership for Restoration
 Searching for Groundwater
 Pollution Prevention using Risk Assessment
 River Pollution
 Is your Home Killing Fish?
 Agricultural Pesticides and Water
 Direct Toxicity Assessment
 Guidance for Control of Weeds
 Understanding the Drought
 Improving Efficiency & Effectiveness in Flood Defence
 Operational Management
 Roy of the Rivers - cartoon style information for young anglers
 Rod Fishing Licences 1995/96
 "A New Angle" - A Simpler Way of Licensing Fishing
 Reward for Reporting Adipose Fin Clipped Fish
 0800 Free phone line - stickers and leaflets
 Various NRA badges and stickers
 Minicom link - stickers and leaflets

Newsletters

Aquarius (staff newsletter)
 "Catch" Magazine - 2 Editions
 "The Bridge" Yorkshire internal staff newsletter
 "Watermark" Northumbria and Yorkshire staff newsletter

Videos

Northumbrian Salmon
 Yarm Flood Defence Scheme
 Water Safety
 River Tyne Catchment Management Plan

APPENDICES

Humber Estuary Strategy (May 1992)
Pollution of the River Rother (June 1992)
River Aire Catchment Management Plan (Nov 1992)
Vale of York Groundwater Scheme (Feb 1993)

Information

Pollution Notes for Students
River Facts - Guardians of the Water Environment
River Facts - Environmental Quality & Pollution Control
River Facts - Fisheries, Recreation & Conservation
River Facts - Land Drainage & Flood Defence
River Facts - Water Resources
River Information Sheets
Fisherman's Telephone Information Service
Canoeist's Telephone Information Service

Posters

Duties & Responsibilities of NRA
Avoiding Farm Pollution
Silage Pollution Kills
Kielder Salmon Hatchery

Displays

The Good, The Bad and The Ugly (Farm Pollution)
The Tees - An Improving River
North Northumberland Otter Project
National Riverwatch
Emergency Hotline
The River Tyne
On the Water, In the Water, By the Water
River Tyne Catchment Management Plan
River Coquet Catchment Management Plan

NORTH WEST

Catchment Management Plans

River Irwell Consultation Report
Derwent and Cumbria Coast Consultation Report
Ribble Consultation Report
Douglas - Final Plan

Leaflets

Fact File - North West
The National Rivers Authority
About the North West Region
Keeping You Informed
Public Register
On Duty Round the Clock
Maintaining Water Courses
River Classification
Paying for Flood Defence
Main River
EC Directives and Control of Water Pollution
Environmental Protection and Pollution Control
Windemere (Anti-Pollution guidelines for boat owners)
Water Resources
River Ribble
River Alt
River Lune
Protecting and Improving Fisheries in the North West of England
Catchment Management Planning
River Douglas Catchment Management Plan
Groundwater Resources in the Rufford Area
Charlton Brook Flood Alleviation Scheme
Haverigg Flood Defences
Don't Rubbish Your Rivers
South Area Guide to the NRA
The Eden Fact File
The Weaver Fact File
Silt leaflet

Hazard Warning - Rubbish in Rivers
Rivercall

Newsletters/Magazines

Newstream (external regional newspaper)
Splash (internal staff newsletter)

Videos

Flood Defence
Fisheries
Water Resources
Don't Rubbish Your Rivers
CMP - Irwell
CMP - Derwent & Cumbria Coast
CMP - Ribble

SEVERN-TRENT

Catchment Management Plans

Blythe/Cole/Bourne Consultation Report
Warwickshire Avon Consultation Report
River Stour Final Plan
River Stour Annual Review
Blythe/Cole/Bourne Action Plan
Warwickshire Avon Action Plan
Humber Estuary Consultation Report
River Severn-Upper Reaches Consultation Report
Dove Consultation Report
River Erewash Consultation Report

Brochures

River Tame
Trent Catchment
Severn Catchment
Lea Marston
Llyn Clywedog
Fisheries in the Severn-Trent Region
Careers Guide
Teme Catchment
Regional Water Resources Strategy
Environmental Quality Summary
Environmental Quality Data Report
Silt
Ponds & Conservation
River Avon users Handbook
River Trent Angling Guide
Water Abstraction & Impoundment-folder
Hydrometric Report
Canoeists Guide to River Severn
Colouring and Quiz Book

Leaflets

NRA Facts at a Glance
Severn Bore
Trent Aegir
Navigation in the Severn-Trent Region
Pollution and Its Effects
Pollution and How to Spot It
Pollution We're All Responsible
Pollution Kills
Slurry Storage
The Tame Catchment
Water Abstraction
Spray Irrigation
Flood Defence
River Severn
Chlorinated Solvents
Pesticides
Blue Green Algae
River Trent
Water Quality

Shrewsbury Town - The Flooding Problem
 Chlorinated Solvents and Water
 NRA Recreation Sites
 Agricultural Activity and Pollution Prevention
 Who's Who in the NRA
 Clee Hill Radar
 Avon Weirs Trust
 Severn-Trent Regional Map
 River Flooding
 Catchment Management Planning
 1995/96 Regional Plan Summary
 Dredging and Archaeology
 Abstraction Charges
 Junior Glossary of Terms
 Agricultural Activity & Pollution Prevention
 Provision and Maintenance of Nests & Roosting sites on River Bridges
 Pollution & How to spot it
 Flood Defence
 Operations & protected Species
 Severn-Trent Regional Addresses
 Wordsearch

Displays

Revised Mobile Exhibition
 Pilot Riverside Display
 Wildfowl Trust - Interpretation Boards
 Updated reception displays
 Erewash CMP
 Dove CMP
 Severn Upper Reaches CMP
 Sandiacre Train Derailment
 Holme Sluices
 Avon - Evesham Weirs

Videos

Pollution Prevention Pays
 Groundwater "Out of Sight but not out of Mind"
 Working in the Environment
 Water Carers
 Liquid Assets

Posters

NRA General
 Oil Pollution
 Flood Warnings

Newsletters

The Source

Maps

Flood Defence (Reaches maps)
 Main River Map

SOUTHERN

Catchment Management Plans
 River Itchen Catchment Management Plan, Consultation Report, Summary and final plan
 River Test Catchment Management Plan, Consultation Report, Leaflet and final plan
 River Medway Catchment Management Plan, Consultation Report, Leaflet and final plan
 East Sussex Rother Catchment Management Plan, Consultation Report and Summary
 River Darent Catchment Management Plan, Consultation Report
 River Catchment Management Plan Data Report
 Kentish Stour Catchment Management Plan, Consultation Report

Brochures

Harbour of Rye Management Plan
 Policy and Practice in the Protection of Groundwater - Regional Appendix

A Guide to Bank Restoration and River Narrowing
 Fishing in the South
 The Source - A Guide to the Southern Region
 Fisheries Byelaws
 Guide to the Medway Navigation
 Harbour of Rye
 "When the Rains came..."
 Rye Harbour Byelaws
 Pond Pack
 Boating on Sussex Rivers
 Land Drainage and Sea Defence Byelaws
 Hydrometry How the NRA Measures Water
 Water for the Future in Kent
 Sailors Guide to Rye
 Land Drainage and Sea Defence Byelaws
 River Lavant Flood Investigation July 1994
 River Lavant Options Report November 1994
 Flooding - A Guide to Householders

Leaflets

Fisheries Activities 1993/94
 Fisheries Fact Sheets
 River Darent Action Plan
 River Darent Conservation Project
 Sustaining Our Resources - Southern Region Water Resources
 Development Strategy
 Sustaining Our Resources - Summary
 Drought in the South
 Irrigation of golf courses
 Predicted High Tide Tables 1993
 Chlorinated Solvents and Water - How Can You Help Avoid Pollution
 Protecting the River Itchen - the Arle Groundwater Scheme
 River Medway
 River Arun
 Kentish Stour
 Eastern Rother
 Cuckmere River
 River Meon
 River Ouse
 River Test
 River Adur
 River Itchen
 Rivers of the Isle of Wight
 The Medway Navigation
 Drought - The Dry Facts
 The Southern Angle
 The Beaches are on the Move
 Flood Warning Service - Emergency Procedures
 River pollution and how to avoid it
 River and effluent quality and consents
 Is your farm really safe?
 Are you storing animal wastes safely?
 Are you disposing of animal wastes safely?
 Is your oil storage safe?
 Is your sheep dipping safe?
 Information sheets - Education Series
 Pumping Stations
 Ashford Flood Alleviation Scheme
 Freshwater Fish of the Southern Region
 Buyer Beware of Poached Salmon
 Otters
 Pond Pack
 The Darent Valley Enhancement Programme

Newsletter

On Stream (staff newsletter)
 Newsreels for Anglers

APPENDICES

SOUTH WESTERN

Catchment Management Plans

Hampshire Avon Final Report
River Torridge Final Report
Lower Bristol Avon Consultation Plan & Leaflet
Upper Bristol Avon Consultation Plan & Booklet
Upper Bristol Avon Action Plan
Frome and Piddle Consultation Plan & Leaflet
Seaton Looe & Fowey Consultation Plan & Leaflet
River Taw Consultation Plan & Leaflet

Books

The Guide to Angling in South West England 1994/95 (published by Westcountry Tourist Board in co-operation with the NRA).

Brochures

Flood Defences for Axminster
Barnstaple Tidal Defence Scheme
Truro (River Kenwyn) flood defence scheme
Exeter Flood Defence Scheme
Bath Flood Defence Scheme
Sea Defences for Dawlish Warren and Teignmouth
Sea Defences Beesands and Torcross
Tidal Defences for Instow
Blandford Forum flood alleviation scheme
Lower Stour Flood Defences Christchurch
Weirs, Hatches and Silt
Development and Flood Risk
Weather Radar and Flood Warning Services
National Rod Fishing Licences
A guide to rod fishing byelaws in NRA - Devon and Cornwall Areas
NRA North and South Wessex Areas Fishery Byelaws 1992 - Water Resources Act 1991
Buyer Beware!
Information for river Canoeists
Bridport Flood Defence Scheme
Customer Charter
Searching for Groundwater
Agriculture, Pesticides and Water
Biological Monitoring
Preventing Oil Spills Poster
Roy of the Rivers
Angling - North West Wessex
Angling - South Wessex
Water for the South West - A consultation document
Wessex Areas Water Resources Strategy
Tomorrow's Water : Regional Water Resources Development Strategy
River Piddle Low Flows
The River Avon and its tributaries near Malmesbury
Careers
Brinkworth Brook Restoration Project
Code of Practice on Matters Relating to Land
Freshwater Fish of the Wessex Region
Looking at the River Tone
River Pack - includes Pollution, Pond Pack, Water, Wildlife Along Rivers
Regional Brochure
Somerset Levels & Moors

Leaflets

Guardians of the Water Environment
Cornwall Area Leaflet
Devon Area Leaflet
North Wessex Leaflet
South Wessex Leaflet
River Pollution and How to Avoid It
Oil Pollution and How to Avoid It
Chemical Pollution and How to Avoid It

Chlorinated solvent pollution and how to avoid it
Pollution from your home and how to avoid it
Farm Pollution - Together we can beat it
Water Quality - public register
Exeter Laboratory
Control of Pollution (Silage, Slurry and Agricultural Fuel Oil)
Cleaning up the Culm
Blue-Green Algal Blooms
Wheal Jane - A Clear Way Forward
Water Wisdom
Silage Liquor Can Kill
Cobacombe Cross Weather Radar Station
Pollution Prevention Guidelines (set of 17)
Development Control Fact Sheets (1-14)
Flood Defence Law (Training Course Document)
Looking at the River Tone
Operation Streamclean (wrong connections leaflet)
Contracts Department
The Hampshire Avon - Safeguarding the future of your fishery
River Frome restoration project
Code of practice - information for landowners and occupiers

Newsletter

Waterspout (employee newsletter)

Videos

Wheal Jane - A Clear Way Forward
Farm Pollution - Together We Can Beat It
Groundwater - Out of Sight but not Out of Mind
Flood Defence Video

Information Sheets

Bathing Waters
Beesands Tidal Defences
Barbican Tidal Defences
Water - An Introduction

Posters

Preventing Oil Spills

THAMES

Catchment Management Plans

Blackwater River Catchment Management Plan (Consultation Draft - Summary Report)
River Kennet Catchment Management Plan (Final Report - Summary Leaflet)
Cherwell
Upper, Middle and Lower Lee
Upper Thames

Brochures

Guardians of the Water Environment (Regional Brochure)
Thames Review
Fobney Mead Brochure
Future Water Resources in the Thames Region

Leaflets

Fact Files
- Blackwater
- Cherwell
- Colne
- Stort
- Kennet
- Lee
- Loddon
- Mimram
- Mole
- South London's Urban Rivers
- Ray (Wiltshire)
- Roding
- Pang
- Wye
- Thame
- Tidal Thames
- Wey
- Windrush

Locks and Weirs on the River Thames - How do they work?

River Thames Handbook
 Cruising on the River Thames - A Boating Guide
 Thames Navigation - Improving the Flow Phase II
 Hambleden Lock
 Blue-Green Algae
 River Pollution and How to Avoid It
 Oil Pollution and How to Avoid It
 Chemical Pollution and How to Avoid It
 Chlorinated Solvent Pollution and How to Avoid It
 The Control of Pollution (Silage, Slurry & Agricultural Fuel Oil) Regulations 1991
 Looking After Our Rivers
 Fact File: Pollution Control
 Fact File: Instrumental Monitoring
 Your Right to the Facts
 The Thames Barrier
 Cascade - Flood Forecasting and Monitoring
 Riverside Owners Guide
 Weather Radar and Flood Warning Services
 Water Wisdom
 Who's Who in the NRA
 Water - Nature's Precious Resource (Summary Document)
 Pollution from your Home and How to Avoid It
 Catchment Management Plans
 Agriculture Pesticides and Water
 Biological Water Quality Monitoring
 London's Drowning
 River Flooding
 River Canoeists
 Camping Beside the River Thames
 Nature and the Freshwater River Thames
 Educational Fact Files

- Fisheries
- Flood Defence
- Conservation
- Environmental Quality
- Navigation
- Recreation
- Water Resources

Contact Guides

- North East Area
- West Area
- South East Area

Newsletters

Banknotes (staff newsletter)
 Thames Review
 Newscast

Posters

Pollution Game
 Functions Poster

WELSH**Catchment Management Consultation Reports**

- Ogmore	- Upper Wye
- Cleddau	- Menai
- Conwy	- Ely
- Dee	- Tywi
- Taf	- Tawe & South Gower
- Clwyd	- Lower Wye
- Usk	- Taff
- Glaslyn	

Catchment Management Action Plans

- Cleddau	- Tawe
- Taf	- Menai
- Conwy	

Brochures

Regional Brochure
 Juvenile Salmonid Monitoring Programme Report
 River Wye Angling Guide
 Angling Guide for the Rivers Dee and Clwyd 1992/93
 Canoeists Guide to the River Wye
 Water for Welsh Region (consultation document)
 Managing Water Resources in Welsh region (summary of consultation document)
 Conwy Falls Fish Pass
 River Wye Handbook

Leaflets

Clean Rivers Cup
 Silage is Deadly
 Oil, Chemicals and Pesticides
 Rod Fishing Byelaws
 Buyer Beware of Poached Salmon
 Rewards for Tagged Fish
 Safeguard the Environment - a guide for developers
 Dee Stock Assessment Programme
 River Ebbw Catchment
 Whitland Flood Alleviation Scheme
 Conservation & Rivers
 Pollution Prevention Using Risk Assessment
 River Dee Water Protection Zone (consultation document)
 The Use and Design of Oil Separators in Surface Water Drainage
 Above Ground Oil Storage Tanks
 Working at Demolition and Construction Sites
 General Guide to the Prevention of Pollution of Controlled Waters
 Disposal of Sewage where no mains drainage is available
 Restoration of the River Pelenna
 Safeguarding the future of your rivers

Newsletters

Pont (staff newsletter)

Videos

As Nature Intended
 Acid Waters in Wales
 Guarding the Dee
 Flood Defence
 Rearing of Salmon & Sea Trout
 Restoration of the River Pelenna
 Pelenna Minewater
 Neath Canal Minewaters
 Conwy Falls

Display Panels

NRA Welsh Region
 Is Your Farm Pollution Proof?
 The River Llynfi
 Acid Rain
 Barrage Developments
 Micro Tagging of Fish
 Fish Tracking
 Flood Defence
 Water Resources
 Catchment Management Plans
 Farm Management Plans

APPENDICES

VI. R&D PROJECTS COMPLETED AND OUTPUTS PRODUCED

Project No.	Output Reference	Title			
COMMISSION A: WATER QUALITY					
001	Project Record 001/13/W	Sources of farm pollution and impact on river quality - vols. 1, 11 (appendices) and map annex	228	DoE 3412/2	Health effects of sea bathing - Phase 3
	Report 19	Detection of organic farm pollution - the use of a biological technique for the detection and monitoring of farm pollution	242	Note 221	The faunal richness of headwater streams: Stage 2 catchment studies - main report
015	Project Record 15/13/T	Atmospheric inputs to surface waters		Note 221/A	The faunal richness of headwater streams: Stage 2 - catchment studies - appendices
	Report 20	Atmospheric inputs to surface waters (ISBN 1-873160-24-0)	247	Note 321	Development of broad spectrum biosensors for effluent toxicity assessment
051	Note 259	Major water quality issues in France, Germany, the Netherlands and the EC	261	DoE Countryside Survey Report	Integrate survey of running water communities
	Note 260	Dissemination of information on water quality to the public	286	Note 253	Lakes: Classification and monitoring - A strategy for the classification of lakes
	Note 261	Approaches taken in other European countries	286	Project Record 286/6/A	Lakes: Classification and monitoring - A strategy for the classification of lakes
053	Note 266	Major water quality research programmes in France, Germany and the Netherlands	290	Project Record 290/4/SW	Pathogenic micro organisms
	Note 332	A review of the biocides most commonly used in industrial water systems in the UK	292	292/2,4,5,6,10,11, W	Risk assessment methodology - catchment control
	Note 339	Proposed environmental quality standards for chlorine in fresh and marine waters	305	Note 346	Nitrification rates in rivers and estuaries
	Note 340	A review of fire fighting foams to identify priorities for EQS development	313	Note 281	Catchment source areas and the ecological effects of wetland liming Phases 1 & 2
062	Note 208	Timber chemicals - priorities for environmental quality standard development		Project Record 313/8/W	Catchment source areas and the ecological effects of wetland liming Phases 1 & 2
	Note 209	Microbiological techniques	320	Project Record 320/1/Wq	Health effects of white-water canoeing (1992 paper in Lancet)
	Note 234	Discrimination of human and animal pollution: a review	322	Note 338	Interpretation of River Quality Data (Lapwing)
	Note 254	Microbiological techniques	327	Note 311	Modelling of blue-green algal blooms
	Note 255	Sulphite-reducing clostridia		Project Record 327/5/A	Modelling of blue-green algal blooms
105	Note 203	Microbiological techniques	331	Note 277	Metal contamination of sediments and statutory quality objectives
	Project Record 105/2/A	Pseudomonas aeruginosa	337	Project Record 337/5/SW	Combined distribution method for estuaries - Supporting documentation
107	Note 106	Effects of sediment metals on estuarine benthic organisms		Project Record 337/6/SW	Combined distribution method for estuaries - Supporting documentation
	Project Record 107/10/SW	Effects of sediment metals on estuarine benthic organisms	339	Note 243	Treatment processes for ferruginous discharges from disused coal workings
110	Note 307	Fate of organic micropollutants in estuaries		Project Record 339/11/Y	Treatment processes for ferruginous discharges from disused coal workings
	Note 308	Fate of organic micropollutants in estuaries	343	Note 158	Development of a biotic index for the assessment of the pollution status of marine benthic communities
206	Note 328	Prediction of groundwater nitrate concentrations	350	Note 190	Mike 11 application guide for intermittent discharge
215	Note 244	Prediction of groundwater nitrate concentrations - ANNA user guide		Project Record 350/12/NW	Mike 11 application guide
		Persistent organic compounds within the Mersey estuary - environmental fate study	353	Note 70	Nutrient levels and statutory quality objectives for estuaries and coastal waters
		Method for the analysis of volatile organochlorine solvents (VOCl _s) in groundwater and river water using purge and trap gas chromatography-mass spectrometry	355	355/1/HO	CYCLOPS - automatic formal sampling machine
	Project Record 215/16/T	Methodology for organics analysis	359	Note 262	Low rate irrigation of dilute farm wastes
220	Note 224	Details of method development		Project Record 359/6/ST	Low rate irrigation of dilute farm wastes
	PR 23-30	Evaluation and demonstration facility	364	Note 276	Is biomanipulation a useful technique in lake management?
	PR 14-17	Evaluation Report Series	374	Note 218	Wastewater disinfection: laboratory/field studies - phase 2
227	Note 257	Metal speciation in rivers and estuaries: zinc and chromium	395	Project Record 395/3/A	Chlorophyll a: SCA method revision
			396	Note 323	Sediment toxicity of poorly soluble substances
			402	Note 282	Review and assessment of replacements for biochemical oxygen demand (BOD) and suspended solids
				Project Record 402/11/HO	Review and assessment of replacements for biochemical oxygen demand (BOD) and suspended solids

412	FR 356	Marine and estuarine modelling: current practice in the UK	497	Note 264	Improved tissue culture techniques for enterovirus analysis
	FR 374	A framework for marine and estuarine model specification in the UK		Project Record 497/2/SW	Improved tissue culture techniques for enterovirus analysis
415	FR 339	Interim report on sewage-derived aesthetic pollution	504	Note 331	Analytical quality control for macroinvertebrate enumeration
420	Note 322	Ecotoxicology methods manual	COMMISSION B: WATER RESOURCES		
425	CIRIA Report 142 R&D Report 16)	Control of pollution from highway drainage discharges	207	Note 247	Remote sensing of snow by satellite
427	Project Record 427/3/HO	Assessment of Field Monitors for Consenting Monitoring		Project Record 207/10/N&Y	Development and evaluation of techniques
	Note 286	Evaluation of possible replacements for biochemical oxygen demand (BOD5) and suspended solids		Note 274	Remote sensing of snow by satellite
432	FR 0465	Development of a procedure for assessing the impact of combined sewer overflows	257	Note 274	Low flow estimation in artificially influenced catchments
	FR 0466	User guide for assessing the impact of combined sewer overflows	316	Note 270	The Coalburn catchment experiment - 25 year review
439	Note 293	Determination of triazine herbicides in chalk aquifer materials		Project Record 316/3/NW	The Coalburn catchment experiment - 25 year review
	Note 294	Analytical method for the determination of acid herbicides in sandstone and chalk aquifer materials	406	Projects Records 406/1,2,3/5	Intelligent system for water abstraction licence determinations
	Note 310	Pesticides in major aquifers - Phase 2: Modelling review	413	Report 14	Demand for irrigation water (ISBN 0-11-885833-5)
	Project Record 439/16/A	Pesticides in major aquifers: Phase 2	414	Note 313	Surface water yield assessment
	Report 17	Pesticides in major aquifers		Project Record 414/5/Y	Surface water yields assessment
449	449/1/SW	Modelling E.Coli in streams	421	Project Record 421/1/NW	Manual of aquifer properties
450	Note 269	Impacts of pesticides on river ecology	478	Note 333	Calibration of portable electromagnetic current meters - Performance evaluation of three commercial meters
451	Note 232	Acoustic doppler current profiling		Project Record 478/1/T	Calibration of portable electromagnetic current meters
453	Note 320	Land management techniques	484	Note 258	Evaluation of use values from alleviating low flows
	Project Record 453/7/Y	Land management techniques: detailed information		Project Record 484/2/HO	The evaluation of the recreational benefits and other use values from alleviating low flows
456	Note 226	Protocol for wastewater disinfectant trials	491	Note 330	Scoping Study to Develop Design Tools for Low Flow Estimation
	Note 227	Measurement and calculation of UV dose during sewage disinfection	515	Project Record 515/2/NY	Extended flow records at key locations in E&W - Phase 1
	Note 228	Efficacy and environment effects of peracetic acid as a sewage disinfectant: addendum to Project Report 231/6/SW	COMMISSION C: FLOOD DEFENCE		
	Note 229	Review of the use of chlorine for sewage disinfection	264	Project Record 264/1/SW	A knowledge-based approach to modelling fast response catchments
457	Note 288	Establishment of practical pH scales and ammonia ionisation in estuaries - Part 1. Validated ammonia model	299	Project Record 299/1/Wx	Planning and Flood Risk: A strategic approach for the NRA
	Note 297	Establishment of practical pH scales and ammonia ionisation in estuaries Part 2 Validated ammonia model - programming supplement	335	Note 134	Review of research and development programme in topic area C3: Catchment appraisal and control
473	Note 314	A review of the use of field test kits for water quality monitoring	357	Note 252	Development of distributed models using radar rainfall data
	Project Record 473/7/Y	A review of the use of field test kits for water quality monitoring: Background information	373	Note 160	Coastal and river infrastructure management systems for flood defence: user manual
476	Note 298	Male specific and somatic coliphages as models for enteric viruses		Project Record 373/2/T	Coastal and river infrastructure management systems for flood defence: user manual
	Project Record 476/5/SW	Male specific and somatic coliphages as models for enteric viruses	382	Project Record 382/3/A	Armourstone foundations - Phase 1
482	Note 368	Early warning system for potential change in river class	441	Project Record 441/3/A	Suggested guidelines for the monitoring of natural and recharged beaches
496	Note 263	Comparison of agar and broth formulations of membrane lauryl sulphate medium	444	Note 324	Saltmarsh Management - Saltmarsh Guide
	Project Record 496/2/SW	Comparison of agar and broth formulations of membrane lauryl sulphate medium			

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445	Note 272	Application of appropriate wave transformation models - Guidance on evaluating and selecting a model for design use
	Project Record 445/2/A	Application of appropriate wave transformation models - Guidance on evaluating and selecting a model for design use
447	Note 283	Effectiveness of beach control operations - Review of beach management methods
	Project Record 447/2/A	Effectiveness of beach control operations - Review of beach management methods
481	Project Record 481/3/A	Rehabilitation of coastal structures Design guidelines

COMMISSION D: FISHERIES

244	Note 206	The NRA national fisheries classification scheme - A guide for users
	Project Record 244/7/N&Y	Development of a fisheries classification scheme
249	Report 18	Status of Rare Fish (ISBN 0-11-886511-0)
256	Project Record 256/13/ST	Elver and eel stock assessment in the Severn and Avon
325	Note 292	Guidance notes on the design and analysis of river fishery surveys
	Note 299	Fish Stock Assessment Methodology (Demonstration Software + Guidance Notes)
	Project Record 325/13/A	Fish Stock Assessment Methodology - Evaluation Data
443	Note 318	Sea Trout investigations - Phase 1 Final Report
	Report 25	Sea Trout stocks in England & Wales (ISBN 1-873160-22-4)

COMMISSION E: RECREATION AND NAVIGATION

336	Note 204	River bank erosion problems - recommendations for their management within the NRA
385	Note 251	Recreational survey methodology
501	Note 385	Socio-Economic Review of Angling 1994
	Note 295	Socio-Economic Review of Angling, Rod Licences
	Fisheries Technical Report 5	National angling survey 1994

COMMISSION F: CONSERVATION

255	Note 2	Environmental opportunities in low-lying coastal areas under a scenario of climate change
	Project Record 255/3/T	Environmental opportunities in low-lying coastal areas under a scenario of climate change
291	Note 135	Riparian and instream species Habitat relationships
294	Project Record 294/7/W	Control of invasive riparian and aquatic weeds
	Note 233	Control of invasive riparian and aquatic weeds
393	Note 107	Review of nature conservation survey methodologies
	Note 186	Review of nature conservation survey methodologies: Conservation database and operating manual
	Project Record 393/5/SW	Review of nature conservation survey methodologies

461	Report 15	Fish-eating birds Assessing their impact on freshwater fisheries
	Project Record 461/8/N&Y	Avian piscivores: Basis for policy Detailed information
466	Note 267	Avian piscivores: basis for policy
	Note 265	River restoration project - institutional aspects
506	Note 289	The NRA and archaeology: Impacts of activities
	Project Record 506/1/W	The NRA and archaeology: Impacts of activities: Detailed information

COMMISSION G: CROSS-FUNCTIONAL

253	Note 37	Economic value of changes to the water environment
321	Note 174	Sources, pathways and sinks of litter within riverine and marine environments
	Project Record 321/8/W	Sources, pathways and sinks of litter within riverine and marine environments
375	Note 249	R&D project management manual: user manual
	Project Record 375/1/HO	R&D project management manual
405	Project Record 405/2/S	Catchment management issues: Use related standards

TECHNICAL SERVICES OUTPUTS

086	Project Record 086/22/HO	The Comparative Resistance of pathogens and indicator organisms to UV disinfection
TS	Note 290	Summary report on environmental developments 17 - January to March 1994
TS	Note 316	Summary report on environmental developments 18 - April to June 1994
TS	Notes 343	Summary report on environmental developments 19 - July to September 1994
TS	Note 360	Summary report on environmental developments 20 - October to December 1994

The distribution of most R&D outputs on behalf of the NRA is now handled by:

The Foundation for Water Research
Allen House, The Listons
Liston Road
Marlow
Bucks
SL7 1FD
Tel: 01628 891589
Fax: 01628 472711

A full *List of R&D Outputs* from September 1989 to September 1994, containing details of price and availability, can be obtained from the Foundation for Water Research or from the NRA R&D Section at Head Office.

VII. SELECTED STATISTICS

Please note that, unless otherwise stated, the reporting period for all statistics relates to the NRA financial year from 1st April 1994 to 31st March 1995.

WATER RESOURCES

Rainfall*

Region	Annual Total (mm)		Annual Total as a % of long-term average	
	93/94	94/95	93/94	94/95
Northumbria & Yorkshire	1,038	902	121	106
North West	1,308	1,393	109	116
Welsh	1,583	1,524	120	116
Severn-Trent	962	834	128	110
Anglian	805	682	135	114
Thames	853	799	124	116
Southern	1,013	1,030	130	132
South Western	1,392	1,259	137	124
National Weighted Average	1,138	1,064	127	119

* These are the best available figures from the Met Office at each year end. Long-term average used is that of 1961-90.

Total Abstraction Licence Inspections

Region	93/94	94/95
Northumbria & Yorkshire	2,213	2,187
North West	2,050	1,504
Welsh	1,665	1,518
Severn-Trent	3,219	3,132
Anglian	3,280	4,907
Thames	1,422	1,815
Southern	2,660	1,891
South Western	1,961	2,108
Total	18,470	19,062

APPENDICES

WATER QUALITY

Percentage of River and Canal by GQA Chemical Water Quality Class*

Region	Good Quality(%)				Fair Quality(%)				Poor Quality(%)		Bad Quality(%)	
	Class A		Class B		Class C		Class D		Class E		Class F	
	1988-1990	1992-1994	1988-1990	1992-1994	1988-1990	1992-1994	1988-1990	1992-1994	1988-1990	1992-1994	1988-1990	1992-1994
Northumbria & Yorkshire	19.8	30.0	38.0	32.6	13.5	13.5	10.4	8.4	14.3	14.1	4.0	1.4
North West	22.5	20.3	19.4	32.9	17.0	17.7	13.9	13.1	20.7	13.3	6.5	2.8
Welsh	43.9	64.0	35.3	25.4	10.6	6.3	5.8	2.2	3.4	1.7	1.0	0.3
Severn-Trent	8.1	10.5	26.4	32.9	28.7	32.5	17.4	13.0	17.5	10.0	2.0	1.0
Anglian	0.8	4.0	16.6	31.0	36.9	33.8	26.3	18.2	17.2	12.2	2.2	0.8
Thames	8.9	11.3	27.8	42.5	29.7	29.7	16.4	12.5	15.9	3.8	1.3	0.3
Southern	10.9	12.3	32.6	42.7	30.7	30.5	13.4	7.9	10.9	6.2	1.5	0.5
South Western	24.3	38.8	39.8	35.2	19.2	19.1	10.3	4.0	5.4	2.5	1.0	0.5
Total	17.6	25.3	30.1	33.5	23.0	22.1	14.2	9.9	12.8	8.3	2.3	1.0

*These figures are given on a calendar year basis.

Percentage of River and Canal Water Quality changing grade between 1988-90 and 1992-94

Region	Length upgraded	Length downgraded	Net improvement
	%	%	%
Northumbria & Yorkshire	32.3	15.0	17.4
North West	33.0	17.9	15.0
Welsh	38.4	7.6	30.9
Severn-Trent	37.5	15.2	22.3
Anglian	45.6	12.1	33.5
Thames	47.1	12.0	35.0
Southern	37.1	14.7	22.4
South Western	38.5	9.6	28.8
Total	38.8	12.7	26.1

Sampling and Analysis

	Total Number of Water samples Analysed		Total number of determinations made	
	93/94	94/95	93/94	94/95
Total	444,130	440,518	5,294,703	5,147,105

Note: Nearly all regional samples are analysed by the National Laboratory Service, hence the reason for not showing a regional split.

Pollution Incidents*

Region	Total No of Reported Incidents		Major (Category 1) Incidents	
	1993	1994	1993	1994
Northumbria & Yorkshire	4715	4761	61	38
North West	4842	4776	77	45
Welsh	4013	4438	30	24
Severn-Trent	6689	6633	93	63
Anglian	3504	3693	10	12
Thames	3538	3763	5	5
Southern	1853	1719	7	5
South Western	5142	5508	48	37
Total	34296	35291	331	229

*These figures are given on a calendar year basis.

Enforcement

Region	Number of Successful Prosecutions		Total Fines (£)	
	93/94	94/95	93/94	94/95
Northumbria & Yorkshire	50	41	176,100	167,250
North West	80	71	256,600	238,250
Welsh	38	31	74,050	109,725
Severn-Trent	70	41	172,400	120,150
Anglian	64	47	168,650	181,100
Thames	44	41	111,000	98,850
Southern	16	7	32,500	18,000
South Western	61	37	97,280	53,300
Total	423	316	1,088,580	986,625

Designated EC Bathing Waters

Region	Number of Bathing Waters Complying with Directive							
	Pass (No)		Fail (No)		Total (No)		% Complying	
	93/94	94/95	93/94	94/95	93/94	94/95	93/94	94/95
Northumbria & Yorkshire	46	49	10	7	56	56	82.1	87.5
North West	13	24	20	9	33	33	39.4	72.7
Welsh	42	39	9	12	51	51	82.4	76.5
Severn-Trent	0	0	0	0	0	0	n/a	n/a
Anglian	28	27	5	6	33	33	84.8	81.8
Thames	3	2	0	1	3	3	100.0	66.6
Southern	58	53	9	14	67	67	86.6	79.1
South Western	142	151	33	24	175	175	81.1	86.3
Total	332	345	86	73	418	418	79.4	82.5

APPENDICES

Enquiries about Water Quality Data: Examination of Water Quality Registers

Region	Number	
	(prior to Water Act) 88/89	93/94
Northumbria		
& Yorkshire	235	729
North West	103	1,225
Welsh	46	387
Severn-Trent	N/A	155
Anglian	115	1,036
Thames	120	688
Southern	32	184
South Western	100	857
Total	751	5,261
		94/95
		779
		739
		578
		959
		1,341
		1,078
		363
		1,630
		7,467

FLOOD DEFENCE

Land Drainage Consents determined

Region	Number	
	93/94	94/95
Northumbria		
& Yorkshire	629	868
North West	848	723
Welsh	1,115	988
Severn-Trent	1,067	1,115
Anglian	986	1,007
Thames	1,088	831
Southern	285	338
South Western	532	720
Total	6,550	6,590

Flooding

Region	Major Flooding Incidents (Fluvial and Coastal)		Flood Warnings Issued to Police	
	93/94	94/95	93/94	94/95
Northumbria				
& Yorkshire	32	18	80	213
North West	3	20	73	59
Welsh	4	9	152	278
Severn-Trent	4	28	345	369
Anglian	1	1	334	233
Thames	8	24	146	61
Southern	51	6	311	333
South Western	7	3	541	571
Total	110	109	1,982	2,117

APPENDICES

Flood Defence: Works Maintained and New/Improved Defences Constructed 1994/95

Region	Main River (km)		Estuary Defence (km)		Sea Defence (km)		Total (km)	
	Maint'd	New/ Improved	Maint'd	New/ Improved	Maint'd	New/ Improved	Maint'd	New/ Improved
Northumbria & Yorkshire	3,495	7.6	260	2.6	17	0	3,772	10.2
North West	5,152	2.2	160	3.6	92	2.3	5,404	8.1
Welsh	2,689	0.3	136	2.0	53	1.5	2,878	3.8
Severn-Trent	4,621	8.4	92	0.5	48	0	4,761	8.9
Anglian	5,650	5.0	746	25.0	349	4.0	6,745	34.0
Thames	4,239	10.0	30	2.0	0	0	4,269	12.0
Southern	3,322	5.0	394	1.5	129	7.0	3,845	13.5
South Western	1,995	1.4	334	4.8	16	5.5	2,345	11.8
Total	31,163	40.0	2,152	42.0	704	20.3	34,019	102.3

Planning Applications Dealt With

Region	Number	
	93/94	94/95
Northumbria & Yorkshire	7,763	8,483
North West	10,470	17,773
Welsh	8,599	9,565
Severn-Trent	12,638	12,388
Anglian	13,176	12,551
Thames	3,798	4,435
Southern	3,510	4,026
South Western	24,566	22,228
Total	84,520	91,449

APPENDICES

FISHERIES

Rod Licence Sales

Region	000s licences sold		value of sales £000	
	93/94	94/95	93/94	94/95
Northumbria				
& Yorkshire	124	132	1,397	1,578
North West	90	104	1,029	1,358
Welsh	46	51	491	709
Severn-Trent	195	230	2,219	2,777
Anglian	159	150	1,768	1,735
Thames	151	186	1,757	2,203
Southern	70	79	798	930
South Western	60	70	660	825
Total	895	1,002	10,119	12,115

Net Licence Sales

Region	licences sold		value of sales £000	
	93/94	94/95	93/94	94/95
Northumbria				
& Yorkshire	151	138	103	94
North West	229	229	20	20
Welsh	114	122	33	34
Severn-Trent	61	60	4	4
Anglian	93	72	4	3
Thames	0	0	0	0
Southern	2	2	0	0
South Western	110	109	11	11
Total	760	732	175	166

Fisheries Prosecutions

Region	Successful Prosecutions	
	93/94	94/95
Northumbria		
& Yorkshire	590	681
North West	795	822
Welsh	387	278
Severn-Trent	1,092	1,255
Anglian	474	625
Thames	837	1,023
Southern	380	454
South Western	507	444
Total	5,062	5,582

Declared Rod Catches

Region	Salmon (No)		Sea Trout (No)	
	93/94	94/95	93/94	94/95
Northumbria				
& Yorkshire	1,696	1,939	2,172	2,788
North West	6,231	8,840	4,337	6,295
Welsh	5,986	7,201	13,350	24,585
Severn-Trent	336	555	0	39
Anglian	0	0	0	0
Thames	16	16	4	4
Southern	545	208	553	416
South Western	3,922	5,140	6,269	11,525
Total	18,732	23,899	26,685	45,652

Declared Net Catches

	Salmon (No)		Sea Trout (No)	
	93/94	94/95	93/94	94/95
	41,800	46,554	31,814	51,136
	5,460	6,143	2,337	3,343
	3,324	5,008	1,684	3,019
	950	2,321	0	0
	4	3	1,743	1,237
	0	0	0	0
	11	4	7	4
	5,017	6,425	2,302	2,156
	56,566	66,458	39,887	60,895

Fish Kills

Region	Fish Kills Total (No.)		Fish Kills Attended (No.)	
	93/94	94/95	93/94	94/95
Northumbria				
& Yorkshire	230	209	150	205
North West	120	138	118	138
Welsh	80	72	56	39
Severn-Trent	139	206	139	201
Anglian	155	258	90	149
Thames	84	121	77	114
Southern	76	137	60	115
South Western	45	76	40	74
Total	929	1,217	730	1,035

Fish Rescues

	Fish Rescues (No.)		Fish Saved (No. thousands)	
	93/94	94/95	93/94	94/95
	53	28	38	25
	49	39	546	94
	81	42	43	44
	39	50	47	27
	35	44	284	90
	26	45	65	71
	22	37	27	74
	31	27	54	2,014
	336	312	1,104	2,439

APPENDICES

Fishery Improvement and Development

Region	No. of Fish passes, screens, and physico/chemical improvements	
	93/94	94/95
Northumbria		
& Yorkshire	17	24
North West	3	4
Welsh	19	21
Severn-Trent	2	7
Anglian	46	8
Thames	48	51
Southern	28	64
South Western	21	39
Total	184	218

Fish Reared by NRA

Region	Salmonid (No)		Non-Salmonid (No)		Total (No)	
	93/94	94/95	93/94	94/95	93/94	94/95
Northumbria						
& Yorkshire	870,000	926,000	0	0	870,000	926,000
North West	592,000	4,748,540	785,000	1,500,000	1,377,000	6,248,540
Welsh	1,820,000	1,052,900	0	0	1,820,000	1,052,900
Severn- Trent	257,000	421,000	281,386	380,000	538,386	801,000
Anglian	0	0	97,735	0	97,735	0
Thames	80,000	343,804	60,000	18,298	140,000	362,102
Southern	275,135	278,000	129,964	63,000	405,099	341,000
South Western	360,000	227,409	0	0	360,000	227,409
Total	4,254,135	7,997,653	1,354,085	1,961,298	5,608,220	9,958,951

Fish Stocked by NRA

Region	Salmonid (No.)		Non-Salmonid (No.)		Total (No.)	
	93/94	94/95	93/94	94/95	93/94	94/95
Northumbria						
& Yorkshire	825,000	885,000	177,920	275,834	1,002,920	1,160,834
North West	1,587,000	2,657,600	193,000	177,315	1,780,000	2,834,915
Welsh	1,220,000	1,180,700	0	0	1,220,000	1,180,700
Severn-Trent	31,118	247,466	395,672	153,926	426,790	401,392
Anglian	1,102	1,779	304,314	400,118	305,416	401,897
Thames	80,000	343,804	60,000	18,298	140,000	362,102
Southern	267,000	132,820	122,042	141,000	389,042	273,820
South Western	37,900	285,423	44,122	22,626	82,022	308,049
Total	4,049,120	5,734,592	1,297,070	1,189,117	5,346,190	6,923,709

CONSERVATION

No. of NRA Capital Schemes Incorporating Conservation Work

Region	93/94	94/95
Northumbria		
& Yorkshire	15	25
North West	39	60
Welsh	3	5
Severn-Trent	71	100
Anglian	70	61
Thames	76	99
Southern	18	20
South Western	43	68
Total	335	438

Surveys

Region	River (km)		Coast/Estuary (km)		Other (km)		Total Surveyed	
	93/94	94/95	93/94	94/95	93/94	94/95	93/94	94/95
Northumbria								
& Yorkshire	263	994*	100	10	0	0	363	1,004
North West	259	137	0	0	0	0	259	137
Welsh	1,309	942	4	6	3	5	1,316	953
Severn-Trent	228	512	5	0	0	14	233	526
Anglian	1,574	2,123	496	63	0	0	2,070	2,186
Thames	1,134	958	0	0	0	0	1,134	958
Southern	314	674	2	0	0	0	316	674
South Western	302	524	250	6	0	2	552	532
Total	5,383	6,864	857	85	3	21	6,243	6,970

* includes 650km of aerial interpretation survey

NAVIGATION

Licences Issued and Enforcement

Region	Licences In Force (No)		Licence Checks (No)		Licences Complying (No)		Licences Complying (%)	
	93/94	94/95	93/94	94/95	93/94	94/95	93/94	94/95
Anglian	4,752*	4,800	4,668	5,189	4,419	4,797	94.7	92.4
Thames	33,135	31,290	757,032	762,622	755,777	761,590	99.8	99.9
Southern	2,770	2,843	4,956	5,461	4,704	5,267	94.9	96.4
Total	40,657	38,933	766,656	773,272	764,900	771,654	99.8	99.8

Only 3 NRA regions (shown above) have major navigation responsibilities

* Revised downwards from that reported in last year's Annual Report

VIII. GLOSSARY OF ACRONYMS

AMP2	Asset Management Plan	NJSC	National Joint Staff Committee
BA	Broads Authority	NLO	Net Limitation Order
BW	British Waterways	NRA	National Rivers Authority
CCW	Countryside Commission for Wales	NSA	Nitrate Sensitive Area
CMP	Catchment Management Plan	NWC	National Water Classification
COSHH	Control of substances hazardous to health	OFWAT	Office of Water Services
DoE	Department of the Environment	RAB	Regional Advisory Board
EC	European Community	RCS	River Corridor Survey
EN	English Nature	R&D	Research and Development
FRCN	Fisheries, Recreation, Conservation & Navigation	RFAC	Regional Fisheries Advisory Committee
FTE	Full Time Equivalent	RFDC	Regional Flood Defence Committee
FWAG	Farming and Wildlife Advisory Group	RHS	River Habitat Survey
GIA	Grant In Aid	RQO	River Quality Objective
GQA	General Quality Assessment	RRAC	Regional Rivers Advisory Committee
HE	House Equivalent	RSNC	Royal Society for Nature Conservation
HMIP	Her Majesty's Inspectorate of Pollution	RSPB	Royal Society for the Protection of Birds
HNDA	High Natural Dispersion Area	SSSI	Site of Special Scientific Interest
HSE	Health and Safety Executive	STW	Sewage Treatment Works
IAS	Integrated Accounting System	SWQO	Statutory Water Quality Objective
IS	Information Systems	UWWTD	Urban Wastewater Treatment Directive
IT	Information Technology	WAMS	Water Archive and Monitoring System
ITE	Institute of Terrestrial Ecology	WO	Welsh Office
JNCC	Joint Nature Conservation Committee	WQO	Water Quality Objective
MAFF	Ministry of Agriculture, Fisheries and Food	WRA	Waste Regulation Authority
NJCC	National Joint Craft Committee	WS plc	Water and Sewerage Public Limited Company
NJIC	National Joint Industrial Committee		