ANNUAL REPORT 1989/90

REGIONAL REVIEW - WESSEX REGION

Mational Rivers Authority
nformation Centre
Head Office

Class No

acession No **Rewis**



FOREWORD BY REGIONAL GENERAL MANAGER

This is the first annual review of the achievements of the National Rivers Authority, Wessex Region.

It has been an exciting year.

We began as Wessex Rivers, a cinderella division of the Wessex Water Authority. On 1 September we became the Wessex Region of the National Rivers Authority, perhaps the most powerful environmental protection agency in Europe.

We do a job of national importance and one of which we can be justly proud:

- o safeguarding people from the excesses of the water environment
- o safeguarding the water environment from the excesses of people

Since my own appointment as Regional General Manager, I have tried to visit as many staff as possible in their place of work. I have been consistently struck by the enthusiasm, dedication and commitment of so many talented people. Little wonder that so much has been achieved in so short a space of time.

We have established our infrastructure of people, property and procedures. We have established our independance from Wessex Water. We have begun to shape our corporate identity as a vital limb of the NRA.

At the same time we have kept the ship afloat and on course - despite some of the most extreme weather conditions on record. Firstly drought, then flood, both tidal and fluvial. All handled with the same quiet efficiency. It says much for our resilience and serves to demonstrate that our staff are by far the NRA's most valuable asset.

We now have to look forward to a new year and one in which we must begin to make progress towards the achievement of genuine improvements in the water environment. We have prepared our corporate plan, and the financial allocation now awarded to the region for 1990-91 will enable us to strengthen our resources in key areas. It is vital that all members of staff are fully conversant with the NRA's aims and objectives and that their own targets contribute positively towards them.

I believe we have to test our powers to the full, to take some calculated risks. Sometimes we might fail, but I believe there is no disgrace in

failure providing we learn our lessons and move forward. No pain, no gain.

I am confident that we shall fulfil the high expectations held out for the NRA here in the Wessex Region.

Nigel Casic.

NIGEL F READER Regional General Manager NRA - Wessex Region

GM/1289/M 10 04 90

2 SUMMARY OF KEY ACHIEVEMENTS

Wessex Rivers was up and running as a separate operational unit within the Wessex Water Authority on 1 April 1989.

The period to 31 August 1989 witnessed an intense level of activity as preparation was made for privatisation.

Negotiations for the split of assets and liabilities between the successor bodies to the Regional Water Authority proceeded rationally and with few significant problems. It was thus possible to deliver on time a Statutory Scheme of Transfer for the signature of the Secretary of State for the Environment.

The National Rivers Authority, Wessex Region, came into existence on 1 September 1989. The occasion was marked by a launch day celebration staged on the SS Great Britain in Bristol Docks.

The first priority was to set a positive direction for the new organisation and to create the corporate identity of the NRA.

Every member of staff participated in a one day seminar, the theme of which was the NRA's mission, aims and objectives.

A corporate plan was prepared setting the region's targets and priorities for both the immediate future and the medium term.

All staff were given performance appraisals, agreeing personal targets and training needs designed to contribute positively to the achievement of the corporate plan.

Major progress was made with infrastructure:

- o the successful transfer of regional headquarters to Rivers House, East Quay, Bridgwater, helped underpin the new corporate identity;
- the rationalisation of depot arrangements proceeded according to plan, ensuring self sufficiency and vital support for operational activities;
- o all computerised financial systems, previously shared with Wessex Water Plc, were replaced by independent NRA systems;
- o the integrity and confidentiality of all other computer systems was secured:
- o a marine survey vessel, the Vigilance, and two fisheries patrol boats were acquired to strengthen the NRA's capability to serve as guardian of the water environment;
- o an inhouse round the clock control room was established.

Dione, The Lady Digby was appointed to the national board of the NRA in July 1989 and given special responsibility for the Wessex Region.

The Regional Rivers Advisory Committee was formed under the chairmanship of Peter W Lacey with a wide-ranging remit to advise on matters relating to water quality regulation, pollution alleviation, water resources, recreation, amenity and conservation.

Together with the already established Regional Flood Defence Committee, chaired by Ralph H Baker, and Regional Fisheries Advisory Committee, chaired by Major John M Mills, a vital means of two-way communication was put in place between the NRA and all key parties with an interest in the water environment.

The Chairmen of the three regional committees were also appointed members of the Regional Advisory Board, chaired by Lady Digby. The fifth member to be appointed to the Board was the Regional General Manager, head of the executive in the region. It was to this post that Nigel Reader was appointed in September 1989, following several months of acting duties, his predecessor, Clive Swinnerton, having been appointed to the post of Technical Director at NRA Headquarters.

A high and positive public profile was established through effective public relations. Close contact was maintained with the media throughout the period, by issuing regular press releases, holding liaison meetings and deriving maximum publicity from major events such as the launch day of the NRA and the launch of the marine survey vessel, Vigilance - on both north and south coasts!

The extreme weather and other natural phenomena also served to promote the NRA's high public profile:

- o the drought of the Spring, Summer and Autumn, culminating in almost all rivers falling below their 95% exceedance values;
- o the toxic blue-green algae which appeared in several of the region's lakes and reservoirs;
- o the storm tides which hit the south coast in December and the Bristol Channel coast in February;
- o the unprecedented period of sustained wet weather in December, January and February leading to major fluvial flooding.

The efficient management of all of these crises helped ensure that the NRA's public profile was a positive one.

The level of pollution incidents continued to rise, although the number of farm pollutions fell, primarily as a result of the succession of dry months during the Spring, Summer and Autumn.

A hard but fair line was maintained on prosecutions, in compliance with the NRA's national guidelines.

The level of fines meted out by the courts generally reflected the 'greening' of society at large. While the deterrent value of this toughening was welcomed, emphasis in the region continued to be placed on preventing pollution.

Much has been achieved in the year. A robust platform has been secured from which real improvements in the water environment can now be made. We have made our preparations. We have charted our course. We are determined to get there.

3(a) REGIONAL ADVISORY BOARD

Dione, The Lady Digby was appointed to the National Board of the NRA in July 1989 and was given special responsibility for the Wessex Region. In that capacity she became Chairman of the Regional Advisory Board (RAB), the other appointees to which were:

Mr Ralph H Baker - Chairman of the Regional Flood Defence Committee Mr Peter W Lacey - Chairman of the Regional Rivers Advisory Committee Major John M Mills - Chairman of the Regional Fisheries Advisory Committee Mr Nigel F Reader - Regional General Manager

The principal role established for the RAB was to give advice to the Regional General Manager as head of the executive in the region, reconciling and balancing the potentially conflicting views and advice offered by the three regional committees and other interested parties.

The Wessex RAB met on an informal basis on two occasions prior to vesting day and was thus well placed to establish a routine of monthly meetings from 1 September 1989.

In practice the RAB provided the forum and focal point for the communication and discussion of:

- o issues arising at the NRA National Board;
- o issues dealt with by the regional committees
- o matters progressed by the management and staff of the region

A number of special topics were discussed by the RAB during the period September to March, inter alia:

- o the Wessex Region's Corporate Plan for 1990
- o low river flow problems in the region
- o the proposed Somerset Navigation Circuit
- o responsibility for sea defences along north and south coasts
- o leachate problems arising from landfill sites
- o applications for consents to discharge from private sewage treatment plants

The last mentioned resulted in a policy proposal going forward to national level for adoption throughout the NRA.

The RAB has made a successful beginning. It has fostered multi directional communication, and has provided well-balanced advice serving greatly to strengthen the arm of the executive in the region.

3(b) REGIONAL RIVERS ADVISORY COMMITTEE

The Regional Rivers Advisory Committee (RRAC) was established to give advice on all matters relating to water quality regulation, pollution alleviation, recreation, amenity and conservation.

Mr Peter W Lacey was appointed Chairman of the Committee and, together with the Regional General Manager and Regional Board Member, selected the members listed in Appendix 2.

A large number of organisations and groups sought to nominate members for the RRAC. Not surprisingly, some of these were disappointed that their representatives were not selected. In view of the great interest in the activities of the Committee, the Chairman suggested the production of an RRAC Newsletter. This concept was agreed by the Committee and the Newsletter is produced after each meeting and copies sent to a wide range of interested bodies and organisations including those whose nominations for the RRAC were unsuccessful.

- The first meeting of the RRAC was held on 16 November 1989. The Committee received detailed presentations on the role and function of the NRA and its Committees. NRA Officers outlined certain key issues which could arise during the next twelve months. The RRAC identified several items for discussion at future meetings:
 - (a) Consents to discharge from private treatment plants;
 - (b) Bathing beaches;
 - (c) Fish farming;
 - (d) Long sea outfalls;
 - (e) Severn Barrage;
 - (f) Recommendations given regarding applications for MAFF grant for agricultural waste improvement schemes;
 - (g) South Western Sports Council a strategy for the 90's;
 - (h) South Western Sports Council coastal recreation strategies;
 - (i) Minimum acceptable flows and abstraction;
 - (j) Somerset Levels drainage and conservation;
 - (k) Charging policies;
 - (1) Christchurch Harbour;
 - (m) Over-abstraction;
 - (n) EC Directives in conflict with UK Government policy;
 - (o) Review of quarrying in the Mendip area.
- At its second meeting on 27 January 1990, the Committee began work in earnest on a number of priority topics, viz:-

5.1 CORPORATE PLAN 1990

The Committee considered the first Regional Corporate Plan which listed the main priorities that the Authority intends to pursue in the 1990/91 financial year.

5.2 SEVERN BARRAGE

The Committee received a report on the current position regarding the Severn Barrage. It was noted that the NRA Wessex Region, together with the three other regions bordering on the Severn Estuary, planned to consider the environmental and conservation aspects of a report recently produced by the Severn Tidal Power Group.

5.3 RIVER FLOWS AND EXCESSIVE ABSTRACTION

The Committee expressed concern that in some cases abstraction, principally for public water supply, appeared to be reducing river flows below acceptable limits.

The rivers where detailed investigations seemed justified were identified as the Piddle, the Allen, the Wey at Upwey and the Malmesbury Avon.

5.4 LONG SEA OUTFALLS

The Committee received a presentation on the operation and function of sea outfalls. It was noted that scientific evidence seemed to support long sea outfalls as capable of providing compliance with water quality standards and a valid treatment option in coastal situations.

5.5 DISCHARGES FROM PRIVATE SEWAGE TREATMENT PLANTS

In the Wessex region, there is a lot of housing development taking place in rural areas which had often given rise to proposals for private sewage treatment works.

The Committee expressed concern that problems can arise from such works due to inadequate design and construction, poor operation and maintenance and the lack of clear accountability for the discharge.

The Committee supported a proposal to raise the issue at national level and seek to establish a national policy.

Although only two meetings of the RRAC were held before 31 March 1990, it has already become clear that the Committee will provide very positive and effective machinery both in influencing policy in its formative stages and for disseminating NRA policy once established.

3(c) REGIONAL FISHERIES ADVISORY COMMITTEE

- The Regional Fisheries Advisory Committee (RFAC) remained substantially unchanged upon Vesting Day, the terms of appointment of members continuing until 31 March 1990.
- 2 Major John M Mills was confirmed as Chairman of the RFAC, the appointment being for a 12 month period from 1 September 1989.

Lady Dione Digby, Mr Peter W Lacey and Ralph H Baker became ex officio members of the RFAC, being respectively NRA Regional Board member, Chairman of the Regional Rivers Advisory Committee and Chairman of the Regional Flood Defence Committee.

- 3 The RFAC's remit was established as to give advice on the manner in which the NRA should discharge its duty to maintain, improve and develop the salmon, trout, freshwater and eel fisheries within the Wessex region.
- In this role, the RFAC retained the support of three local advisory committees originally set up by the Wessex Water Authority, viz:-

Avon and Dorset Local Fisheries Advisory Committee (Chairman - Major D Rasch)

Bristol Avon Local Fisheries Advisory Committee (Chairman - D Gifford)

Somerset Local Fisheries Advisory Committee (Chairman - K Lacey)

5 The RFAC considered the following major issues during the year:-

5.1 CORPORATE PLAN

The Committee considered the fisheries aspects of the NRA's first Corporate Plan, which identified the main priorities set for 1990-91, together with necessary expenditure and manpower to carry out the programme.

5.2 CAPITAL PROGRAMME

The Committee's capital expenditure for the year amounted to flll,000, which included the following contributions:

£5,000 to the Bristol and Bath and Wiltshire Amalgamated Anglers towards the cost of improvement works at Tockinham Lake, near Lyneham, Wiltshire.

f12,000 towards the cost of restoring the Blandford Weir, Dorset. This work was carried out by the Flood Defence function of the region.

5.3 REVENUE BUDGETS AND LICENCE DUTIES

Following consultations with the local committees and local fisheries organisations, the Committee agreed an increase of 15% in fishing licence duties for the year 1990. As at 31 March 1990 consultations were continuing for the implementation of a further 15% increase in licence duties from 1 January 1991.

5.4 GRANTS

During the year the Committee awarded the following grants in recognition of service and work carried out for fisheries:

£500 to the Avon Preservation and Restocking Society. £600 to the Atlantic Salmon Trust.

5.5 LICENSING OF EEL FISHING IN TIDAL WATERS

Eel fishing in tidal waters, with the exception of fishing for elvers, was exempted from licensing under an excusal granted by MAFF in 1976.

The Committee recommended that a policy be adopted of charging for tidal as well as non-tidal eel fishing, thereby removing anomalies.

5.6 ELVER LICENCES

1990 was the first year since the introduction of Elver licences to control elver fishing in tidal waters. The success of this new licence was evidenced by the issue of 157 licences producing an income of nearly £5,000.

5.7 NATIONAL ANGLING CHAMPIONSHIPS

On 9 September the 2nd Division National Angling Championships were fished on various rivers in the Somerset area. Seventy-eight teams of 12 anglers took part in the event.

5.8 SOUTHERN SEA FISHERIES DISTRICT COMMITTEE

The NRA National Board resolved that representation on the Sea Fisheries Committees should be at member level. Mr C Rothwell, a member of the Avon and Dorset Local Fisheries Advisory Committee, was appointed representative of NRA Wessex Region on the Southern Sea Fisheries District Committee.

- Following the resignation of Major D Rasch from the chairmanship of the Avon and Dorset Local Fisheries Advisory Committee, the Committee elected Mr C Rothwell as its new Chairman.
- 7 The terms of appointment of the member of the RFAC inherited from the Wessex Water Authority expired on 31 March 1990. The process of selecting members of a new Committee (under the chairmanship of Major John M Mills until 31 August 1990) was ongoing at the year end.

3(d) REGIONAL FLOOD DEFENCE COMMITTEE

- The Regional Flood Defence Committee (RFDC) set up by the Wessex Water Authority was transferred to the National Rivers Authority Wessex Region on 1 September 1989. Mr Ralph H Baker continued as Chairman and the only change in membership was that the two Water Authority appointments, Lady Dione Digby and Mr Kenneth F Roberts, were replaced by two NRA appointments Mr Peter W Lacey and Major John M Mills, being Chairmen of the NRA's Regional Rivers Advisory Committee and Regional Fisheries Advisory Committee respectively. Lady Dione Digby, as Regional Board Member, became ex officio member of the RFDC.
- The RFDC continued to enjoy the support of three local committees as follows:

Avon and Dorset Local Flood Defence Committee (Ch Mr Roger Willis) Bristol Avon Local Flood Defence Committee (Ch Mr John Bush) Somerset Local Flood Defence Committee (Ch Mr Stanley D Chedzoy)

- Following the formation of the National Rivers Authority, seminars were held for members of the Regional and three Local Flood Defence Committees to update them on the changes, particularly legal and financial, brought about by the 1989 Water Act. A similar seminar was held for the Chairmen of the 20 Internal Drainage Boards in the Wessex Region.
- 4 The RFDC considered the following major issues during the year:-

4.1 CORPORATE PLAN 1990

The Committee considered the flood defence aspects of the NRA Wessex Region's first Corporate Plan, identifying the main priorities set for 1990-91, together with the necessary expenditure and manpower required to carry out the priority tasks.

A key feature of the plan was to introduce a system of assessing levels of service for main rivers. By setting targets appropriate to the particular reach of river and comparing actual service levels achieved, it would be possible to identify problems and anomalies to which a suitable priority could be assigned.

4.2 LEVIES 1990-91

Flood defence levies for 1990-91 were recommended commensurate with the achievement of the Corporate Plan priorities and with the raising of financing levels to 100% in all three districts. Levies for 1990-91 were allocated to constituent county councils in proportion to estimated relevant population numbers. Levies per head for the three local flood defence districts were as follows:-

Avon and Dorset £4.02 Bristol Avon £1.99 Somerset £7.42

4.3 CAPITAL PROGRAMME 1990-91 AND MEDIUM TERM PLAN 1991-92 TO 1995-96

The Committee approved a capital programme for 1990-91, totalling £3.925 million grant-aided expenditure and £1.140 million non-grant aided expenditure.

The Medium Term Plan for the period 1991-92 to 1995-96 was also approved, priority being given to sea defence and urban flood alleviation schemes. Grant earning levels and grant rates were assumed as follows:-

	Grant Earning Ceiling	Grant Rate (Non-Tidal)
Avon and Dorset	£1.3m	35%
Bristol Avon	£0.3m	15%
Somerset	£2.0m	45%

The Committee welcomed the announcement by MAFF that the grant supplement for tidal schemes was to be raised to 20% (previously 15%) from 1 April 1990. This level of grant was assumed throughout the period covered by the plan.

4.4 SEVERE WEATHER

A report on the South Coast tidal flooding which occurred on 16 December 1989 drew satisfaction from the knowledge that recent schemes had much reduced the potential flooding and damage.

Likewise, the Committee noted with pride that capital works carried out in recent years limited the flooding of properties in February, following the excessive rainfall of December, January and February. Members recorded their appreciation to all staff who had worked long hours over an extended period.

4.5 IMPACT OF CONSERVATION

The Nature Conservancy Council gave notification of the designation of large lengths of the Severn Estuary as Sites of Special Scientific Interest. It was reported that Management Plans were being drawn up to ensure that the maintenance of vital sea defences were not prejudiced by the notification.

The Committee noted the extensive consultations which were required before flood defnece projects could be committed and the consequent vulnerability of the capital programme.

4 FUNCTIONAL REVIEWS

4(a) WATER RESOURCES

i) <u>Inheritance</u>

In advance of vesting day, the shadow NRA organisation had already substantially unified the three separate management units previously operated within its region. While there had been a generally coherent regional policy for resource management, there was inevitably a range of methods of administration and of operational practice. During the year the three distinctly different administrative systems for abstraction licences were integrated and a more uniform standard for hydrometric data collection was introduced. Aquifer protection was an area where there appeared to be a marked lack of cohesion in the policies and practice operating within the region. Work was started on a framework for a unified policy with guidelines for planning development nearing completion and with systematic studies planned for those water source catchments at risk.

A long-term strategy for continued development of public water supply sources had been developed by Wessex Water Authority and appeared to be reasonably well established prior to vesting day. Subsequent tactical changes by water supply undertakers have been noted and are being monitored by the NRA. A review report will be issued early in 1990/91.

ii) The 1989 Drought

During its formative months, the new organisation was tested in several directions by the dry weather conditions that produced the lowest streamflows and groundwater levels experienced since the severely dry 1975/1976 period. It became necessary to invoke many of the prescribed flow conditions attaching to abstraction licences for public water supplies and agricultural use. Investigations were made of the many reports from members of the public concerning fears for the continued security of streams or wells. Possibilities of drought orders were discussed with water supply undertakings although none was brought into effect. Throughout, there was a need for increased monitoring, reporting and forecasting to ensure good preparation for any required eventual emergency measures.

The dry period was effectively brought to an end in December and from then the heavy rains that followed until well into February fully recharged the principal aquifers and water supply reservoirs. Despite the considerable stress which the prolonged dry period had produced on the water resources of the region, at no time did the water supply undertakers in the region consider it necessary to introduce constraints on its customers' use of water.

1

iii) River Low Flows

Attention had been drawn even before vesting day to two rivers which, it was alleged, had been seriously depleted of their natural dry weather flows by excessive licensed abstractions of groundwater. Prolonged investigations of the prevailing condition of these rivers instigated by Wessex Water Authority had proved inconclusive as to the true impact of these abstractions. therefore been necessary for the NRA Wessex Region to plan detailed investigations of these and other similar instances of concern to establish that the balance of interests in streamflows has not been tilted in favour of consumption for public water supplies. The NRA has commissioned studies on the four rivers which are held to be at most hazard from groundwater abstractions and in addition is tightening the inspection of other locations where groundwater abstractions constitute a significant proportion of natural recharge. It is necessary to bear in mind that river characteristics are subject to a variety of influences, not all of which may be controlled by the NRA. Land management practices, whether involving drainage schemes or simply changing the use of land, can have dramatic effects on the physical and biological nature of a river. It is therefore necessary to establish that observed effects are truly the result of water abstractions, however, where this is so the NRA has pledged to seek effective remedies.

iv) <u>Hydrometry</u>

Measurement of the occurrence of rainfall and of the variation of streamflows and groundwater levels are fundamental to a scientific approach to water resource management. Rainfall is measured at 312 sites within the region on a generally well distributed network but many key locations are at sites now transferred to private ownership where the NRA would wish to ensure that longevity of record is maintained. Significant progress was made during the year towards the improvement and standardisation of streamflow measurement and recording across the region. rationalisation of groundwater level observations is programmed. Collection of such data was historically dictated largely by resource development investigations and a more comprehensive coverage of the region is now required to meet the needs of the During the year, the attention paid to the monitoring of conditions applied to abstraction licences has been significantly increased and, together with verification of data returns from abstractors, will be further increased in the coming year. extreme weather conditions have provided the opportunity to obtain data on both low and high river flows. Manpower resource limitations necessitated low flow data collection to be restricted to the more sensitive sites. However, during the winter floods, contingency plans for the measurement of flood flows were successfully enacted and a substantial body of useful data obtained.

v) Aquifer Protection

A comprehensive structural approach to aquifer protection had not been developed by Wessex Water Authority with individual developments being treated on their own merits. However, it was recognised that the duties of the NRA in the protection of groundwater quality can only be effectively assured through co-operation by planning authorities, developers and land users. In order to foster this co-operation, NRA Wessex Region has prepared a set of guidlines relating to the protection of major water sources and is undertaking consultation on these with interested parties. Further guidelines aimed at the more general protection of underground waters are in preparation. These guidelines will stand as a platform from which the NRA will oppose future planning applications which do not conform with good practice and thus significantly threaten the quality of groundwater.

During the year, NRA Wessex Region has taken part in the implementation of the Nitrate Sensitive Areas Pilot Scheme. The catchment of Bristol Waterworks Company's Egford source has been identified as a Nitrate Sensitive Area and relevant technical data was supplied to the Ministry of Agriculture Fisheries and Food who administer the NSA legislation.

Water supply undertakers within the region have identified a number of sources which fail to comply with the Water Supply Quality Regulations in respect of the pesticides parameter. NRA Wessex Region initiated investigations to identify the sources of pesticides in these catchments and assess the practicality of appropriate control measures.

vi) Abstraction Licences

Following the harmonization of licensing practices across its region, the NRA is now faced with arguably the most urgent of its tasks on the water resources front. As a result of the Water Act 1989, many users of water previously exempt from the licensing requirements now need to apply for licences before 1 September 1990. The resolution of each of these applications by NRA staff should ideally be completed within 3 months of receipt but, inevitably given the anticipated quantity of applications, it will be necessary to reach agreement with many applicants on a deferred decision date in order to spread the internal workload. The Wessex Region has been quickly into action on this area of its duties: providing advice to those affected, initiating expert site inspections and promoting an advertising campaign to reach those who might otherwise suffer from ignorance of the new laws.

Good licensing decisions and the monitoring of the quantities actually abstracted provides the core for effective management of water resources. Active monitoring tends to concentrate attention on the major abstractors for reasons of economy but arrangements for wider attention are under consideration. Decisions of a technical and scientific nature are highly dependent on the quality of information available about the context of a proposed abstraction. Quite apart from local hydrometric data, there is a constant need for knowledge about local settings for a range of water interests that might be affected by new abstractions. Thus specific investigations are conducted from time to time to satisfy debate on the consequences of abstractions. Two such investigations are nearing completion: on the Somerset Moors at West Sedgemoor and on the Hampshire Avon and Dorset chalk The West Sedgemoor project will be reported shortly and concerns the assessment of a water use peculiar to agricultural methods in lowland Somerset. The Hampshire Avon study has a further year to completion and is directed towards an improved understanding of the river flows required to mobilise migratory salmonids. Similar studies of the interaction between water availability and river and fisheries management are under consideration and the results could have an important influence on the determination of future licence applications.

The recent transition to management of water resources by the NRA has been achieved relatively smoothly and efficiently to the effect that for the coming year, charges for the abstraction of water will rise by no more than the present inflation rate.

4(b) POLLUTION CONTROL INCLUDING LABORATORY SERVICES

i) <u>Incidents</u>

The number of pollution incidents recorded in 1989/90 was 1663 which was slightly lower than the number recorded in 1988/89 (1791). This is a reversal of the trend of increasing numbers of incidents recorded over recent years. The decrease is contrary to that which might be expected in view of the increasing interest and concern of members of the public in water pollution issues. The extreme weather conditions experienced during the year are undoubtedly responsible for the reduction in the figures.

During the dry summer period of 1989 there was a 74% reduction in the number of pollution incidents caused by silage liquor compared with the previous year. This type of effect was noted throughout the region for most types of farm pollutions thus illustrating the importance of proper provisions for dealing with rain water if farm waste management systems are to be satisfactory under more normal conditions.

In the early months of 1990, the converse situation applied with very few reports of pollution during the periods of flood flows. This no doubt reflected the diluting effects of swollen rivers and the difficulty of observing pollution in turbid, silt laden water.

In spite of the reduction in the total number of pollution incidents, the number of pollutions classed as "serious" increased from 69 in the previous year to 89 and the number of prosecutions from 35 to '48. The increase in the latter reflecting a somewhat tougher policy towards prosecution for pollution offences.

One particularly devastating pollution occurred in May 1989, when a large volume of slurry was released from a farm in Somerset to a tributary of the Cam Brook. A variety of remedial operations were undertaken, including pumping polluted water to foul sewer and pumping oxygen directly into the Brook but despite these efforts over 28,000 fish, including 1,000 trout were killed. The farmer responsible for the discharge was fined £500 with £5,895 costs for remedial and investigative work.

A significant prosecution case was taken against a quarrying company in the Mendips for the discharge of a large volume of inert solids, derived from sandstone quarrying activities. This case set something of a precedent in confirming powers to control trade effluents arising from quarrying operations and has assisted NRA Wessex Region to exert much tighter control on the quality of such discharges.

ii) Water Ouality

The region inherited a comprehensive freshwater monitoring programme for basic sanitary determinands and this was generally maintained during the year although resource limitations caused some difficulty in one area. A shortfall in screening discharges and environmental monitoring for EC List 1 substances was identified but could only be partly remedied within the existing resources.

Freshwater quality data for the 1989 calendar year has been reviewed and indicated a slight net deterioration in quality compared with 1988. The main reason for this appears to be a reflection of the lack of dilution available from some discharges during the dry summer. This information will be used in reviews of discharge consent conditions in relevant areas.

The region took part in a nationally co-ordinated survey of inputs of 'Red List' substances to coastal waters. Samples from 32 sites were collected on three occasions.

In November, the region took delivery of a coastal water survey vessel, Vigilance. This 15.5m steel hulled vessel was provided through the Scheme of Transfer to enable NRA Wessex Region to continue and extend the programme of marine monitoring inherited from the Water Authority. The vessel is well equipped and will enable the region to fulfil its role in the protection of coastal water quality.

iii) Consenting and Regulation

During the first half of the year, the normal workload was greatly increased by a flood of applications from Wessex Water for new consents for previously unconsented discharges and for variations of existing consents. Although these were determined by HMIP, the Rivers Division were involved in preparing the applications and liaisong with HMIP on the details of the consents. After the Transfer Day, over forty undetermined applications were returned by HMIP to the NRA for determination. This exercise will shortly be completed.

In addition to formal applications arising from privatisation, it also became evident that many sewage treatment works consents required review to reflect changes resulting from small improvement schemes. A considerable effort was made to programme these reviews and this work is substantially complete.

A rolling programme of reviews of existing consents has been put in place for all significant discharges in which the required standards to meet the existing water quality objectives are calculated. If the discharge does not achieve that standard then a timetable is agreed with the discharger for improvement of the effluent and imposition of the tighter standard.

Progress has been made in developing policies for control of discharge in source protection zones. In addition, areas where geological conditions make discharges to soakaway unsuitable and areas where lack of dilution and existing pollution problems make discharges to watercourses impractical have been identified. These zones form the basis for response to planning consultations from the planning authorities. These policies are intended to control new development in unsuitable areas. However, in many locations the only practical solution to long term problems is for the Local Authority to requisition first time sewerage schemes. The region is concerned that the current pressure on Local Authority finances, the declining real value of Government first time sewerage grants and the declared intention of Water Services Companies of charging householders for connection to first time sewerage schemes will discourage such schemes.

Progress has been made in updating the Consents Register to act as a charging base for annual charges for discharges. Many old consents are being revoked where discharges have ceased. The names, addresses and details of consents which are still applicable are being confirmed.

The region's water quality modelling capability has been developed during the year and models compiled, calibrated and run for priority river stretches where major capital investment in effluent treatment facilities are required.

iv) <u>Laboratories</u>

Prior to vesting day, all analysis for Wessex Water Authority was undertaken at the Regional Laboratory at Saltford, near Bath. Under the Scheme of Transfer, this laboratory was passed to Wessex Water PLC and NRA Wessex Region had no analytical facility under its direct control.

Since 1 September, chemical analysis has been carried out under contract with emphasis on the use of contractors who can offer appropriate quality assurance and rapid turnround at a competitive cost. During this period work has been contracted to other NRA regions and to Wessex Water PLC. To ensure the security of data, a system for the anonymous submission of samples for analysis was developed and has been employed when using non-NRA laboratories.

The services available from the contractors used and from other potential contractors have been regularly re-appraised to ensure that appropriate standards of service are achieved in the most cost effective way.

In the long term, Wessex Region and South West Region are developing and sharing a jointly operated and funded laboratory situated at Manley House in Exeter. Preparatory groundwork on the site has commenced, interviews and appointments for some posts have been undertaken and the laboratory will be fully operational by early summer 1991.

4(c) FLOOD DEFENCES

i) Operations and Tidal Flooding

The year was dominated by extreme weather conditions. During the summer and autumn, river flows were severely depressed by the hot, dry weather. Prolonged periods of rainfall in December, January and February brought the worst flooding for 30 years to some areas. The accompanying stormy weather caused tidal flooding to both the Dorset and Somerset/Avon coasts at different times. Many hundreds of trees were blown down into rivers.

Dry, warm weather in the spring encouraged early weed growth and on many rivers cutting started much earlier than usual. In Somerset, the natural water supply to the Moors and Levels was maintained enabling the retention of the required levels in the ditches and rhynes. At times this required local alterations to arrangements as flows in the major rivers continued to decline.

By August, flows in the two major chalk rivers in Avon and Dorset Area, the Frome and Avon, had fallen to such levels that weedcutting could be suspended. The retained weed kept levels up sufficiently to protect environmental and fisheries interests without impeding drainage and the suspension was welcomed by all interested parties.

The drought came to an abrupt end on 10 December and between then and Christmas Day, 150mm of rain fell generally throughout the region. On 16 December, a severe storm affected the South Coast with tides reaching the 1 in 35 year return period levels.

Flooding occurred at Chiswell (Portland), Burton Bradstock and West Bay with 39 properties affected. Flood warnings were issued for all affected areas despite the unpredicted height of the tide. Good liaison was maintained with the Police, maritime District Councils and County Emergency Planning Officers throughout the event and on succeeding tides. Limited damage to the sea defences, mainly shingle ridges, was sustained. Improvement works constructed in the last ten years generally performed better than expected.

Flooding from main rivers was experienced throughout the region between 21 January and 16 February. Rainfall across the Areas totalled 280mm generally, equivalent to more than twice the average for the whole of January and February combined. Between 10 December and 16 February rainfall totals exceeded half the annual average rainfall. Flood warnings were issued on 31 occasions with a total of 79 properties affected, some on 2 or 3 occasions. In the Hampshire Avon catchment and on the Somerset Levels and Moors, the flooding was the worst experienced for 30 years. All the pumping stations worked continuously once river levels dropped sufficiently to limit inflow into the storage areas and in the case of Currymoor this continuous pumping lasted 29 days, the longest such period on record for this site.

A further major tidal event occurred on 26 February, this time affecting the Bristol Channel coast. A total of 78 properties were flooded (including 19 behind defences maintained by Woodspring DC) and limited flood warnings were possible. The tide level exceeded that predicted, including surge, by up to 1.2 metres and at Bridgwater the tide level, enhanced by fresh water flows, was the highest this century. Defences improved by capital projects in the last 10 years all performed as designed.

Considering the severity of the event, the flooding that occurred was very limited (in 1981, a slightly more severe event, 1200 properties were flooded), justifying the capital expenditure of the last 10 years. Some damage occurred to unimproved defences and was repaired during the following weeks.

The extreme weather conditions hampered programmed work at times by requiring all manpower to be directed to flood patrols, tree and blockage removal, operation of pumping stations and emergency repairs. In Somerset Area, weedcutting occupied a larger part of the resources than is usual. The value of much of the routine maintenance that was carried out was evidenced during the winter flooding with few problems with flood banks, major structures, pumping stations or outfall flaps. Time was also spent relocating depots and facilities away from Wessex Water PLC sites. These new arrangements are not yet complete with further rationalisation planned for the coming spring. No detriment in the standard of service has been in evidence as a result and in some cases a better response has been apparent.

Following a report by the Royal Society for the Protection of Birds in 1988, into the decline in breeding wading bird numbers in the Somerset Moors, a Steering Group of all interested parties was set up under the chairmanship of NRA Wessex Region. Representatives on the Group include the Royal Society for the Protection of Birds, Nature Conservancy Council, Somerset Trust for Nature Conservation, National Farmers Union, Internal Drainage Boards, Ministry of Agriculture, Fisheries and Food, Somerset County Council and the Association of Drainage Authorities. Two trial Areas were established in late 1988 to monitor changes in bird numbers, agricultural output and associated items following changes in water levels to a regime more suited to breeding waders. A further trial Area will start in Spring 1990 with negotations continuing over two more. Eventually 1000 hectares could be covered by five trial Areas with the trials lasting five years in each Area.

Before any dredging, silt removal or tree maintenance is carried out, the conservation organisations are consulted. Where appropriate, River Corridor Surveys are carried out under the supervision of the Conservation Officer. Following site discussion the proposals are converted into a simplified drawing for the use of supervisors and operators. Follow-up Audits have been implemented to assess the effectiveness of the work in meeting the objectives and also the effectiveness of enhancement works carried out.

ii) Capital Schemes

Capital investment, particularly on urban flood alleviation and sea defences, continues to be made at a rate of f5 million per annum. Early in 1989 a staff recruitment campaign was undertaken to secure staff to undertake base load work in the Medium Term Plan, external Consulting Engineers being employed to accommodate peaks of work within the Plan.

As soon as a problem which may need capital investment has been indentified, it has been necessary to undertake a preliminary appraisal to establish whether a viable solution can be promoted having regard for conservation, economic and technical constraints. The need to comply with recent legislation makes this stage in scheme promotion essential if valuable staff resources are not wasted.

The year witnessed major advances being made to finish urban flood alleviation schemes at Bridport, Dorset and on the Lower Stour in the Christchurch/Bournemouth area. Design work is progressing on schemes for Blandford and Sturminster Marshall and the River Tone in Taunton.

Investment has continued on major sea defence projects on the Somerset coastline. The first phase of a scheme at Wick St Lawrence, north of Weston-Super-Mare, was completed and work has started at Clevedon on Phase 2 works. Tidal defences on the River Parrett continued to be improved. Design work continued on the replacement of New Bow Sluice on the River Banwell and the Pill Tidal Defences, near Bristol

Important flood defence works at Porlock Weir were delayed by objections to proposals from the National Trust and some environmental groups. Liaison continues. A contingent valuation assessment was undertaken on the Brue Summer Flood Alleviation Scheme in order to quantify the benefits of the scheme in financial terms. A questionnaire was distributed to assist in this assessment. Further liaison is necessary with conservation groups.

With the maxim "Prevention is better than Cure", much effort was expended on controlling development in flood risk areas. Much capital investment to alleviate flooding has been expended in the past in areas where flooding has occurred as a result of inprudent development. Good working relations have been established with planning authorities and developers alike. In total some 1200 consultations with significant flood risk implications were considered in the year. To keep control of works which could affect the general drainage in the region, some 250 formal land drainage consents were issued.

iii) Technological Developments

In association with Professor Cluckie of Salford University, a Weather Radar based flood forecasting system continued to be developed. This incorporates facilities for duty hydrologists to monitor events from home locations. Reception of weather radar pictures on a lap-top computer is already available. The full project is due for completion in 1991.

The Ministry of Defence established a weather radar station at Wardon Hill, Dorset which gives good coverage of a large part of the Wessex Region. Establishment of a weather radar station in mid-Devon continues to be pursued but planning approval has proved difficult to achieve.

4(d) FISHERIES

Scheme of Transfer arrangements resulted in the coarse fish rearing units on sewage treatment works sites being retained by Wessex PLC. An appropriate financial arrangement was made whereby a new site would be found for the continuation of fish rearing by the NRA Wessex Region.

A capital programme of £111,000 was considered by the Regional Fisheries Advisory Committee and subsequently agreed.

An increase in fishing licence duties of 15% was implemented, with effect from 1 January 1990.

Under the capital programme, spending was to the level of the approved sum. Two denil fish passes were built on the Washford River, a boomed electro fishing boat was designed and constructed, a contribution was made towards the reconstruction of Blandford Weir on the River Stour and a 20' Hardy fisheries patrol boat was purchased.

A number of fish population surveys were undertaken throughout the region including major surveys on - River Parrett, Moors River, River Marden and the River Frome (Somerset). The second annual survey of juvenile salmonids was also carried out. This formed part of a National Survey.

The provisions of the Salmon and Freshwater Fisheries Act 1975 were rigorously enforced. Numerous patrols were mounted in harbours, estuaries and offshore in the region to prevent the illegal netting and taking of salmon and sea trout.

Mr O A S Cutts took action by judicial review proceedings against the NRA Wessex and Southern Regions, alleging failure to properly administer and enforce the Salmon and Freshwater Fisheries Act 1975 and the Control of Pollution Act 1974. His case was lost and lost again on appeal with costs against him. Mr Cutts subsequently served High Court writs on both regions for damages on his stretchs of river and threatened action in the European Courts.

Considerable interest was shown in elver fishing, 200 licences being sold during March 1990. Runs of elvers and catches were good but vandalism was a problem and a number of people prosecuted for licence offences.

There were rather less fish mortalities during the period because of the unusually dry year. Major losses due to pollution were, however, experienced on the West Sedgemoor Drain and on the Cam Brook.

In many situations, some restocking with appropriate species was undertaken and where possible the costs were recharged to the polluter.

4(e) RECREATION

The region met its statutory duty by making available for recreation the sites to which it has title or rights. The area of water and land, in ownership or leased, is modest and does not permit an extensive range of recreational pursuits.

Without exception, all reservoir sites were retained by Wessex Water Services PLC but the following sites were transferred to the NRA.

Wareham Moorings, River Frome Dorset. Approximately 128 moorings were let directly to owners of river and sea going craft. The right to moor on the river is also leased to two other interests.

Chilton Trinity, near Bridgwater. The site is leased by the region and part of it has been developed as a Youth Activity Centre. The Centre was well used during the year particularly by youth groups at annual camp, approximately 300 children taking part. Letting of the site for jet skiing terminated when the club found alternative facilities. Board sailing and canoeing contined on a daily basis.

River Piddle, Dorset. Thirty-one applications were received for the fourteen permits to fish for Salmon and Migratory Trout on the Authority's stretch of the lower River Piddle. Permits are issued following a ballot and the income generated was £3,850. Season permits were issued for coarse fishing on the lake at Little Canford near Wimborne and brought in an income of £1,700. Wheelchaired disabled persons fish free of charge by arrangement.

4(f) CONSERVATION

The conservation duties of the NRA are enshrined in Sections 8, 9 and 10 of the Water Act and the related Code of Practice. Both came into force during 1989. The NRA was given a duty to conserve and enhance wildlife, landscape and archaeological features associated with waters under NRA control and to promote conservation.

The Conservation Officer, assisted by a consultant River Corridor Surveyor, completed 113 kms of survey during the year. Approximately 80 kms was by way of reaction to capital and maintenance flood defence work. Opportunities to conserve and enhance conservation were taken throughout the region. Guidelines for Conservation in Capital Works incorporating the new legislation were approved. Repeat 'audit' surveys after maintenance carried out are done on selected rivers. The audit method was revised in 1989 and presented to the industry at the River Engineer section meeting of the Institute of Water and Environmental Management. Operational and Maintenance Plans covering all routine work within Sites of Special Scientific Interest are being prepared. A contract was let to complete the sections detailing conservation interest and enhancement measures.

All conservation data were entered on a computer site file. The Area Conservation Resource Maps and database were extended to cover archaeological sites and both were updated using contract staff. A geographically based computer system (Maps in Action) is being trialled for conservation data in 1990. Approximately 35 kms of strategic river survey and a survey of the NRA owned/occupied sites of Westport Canal and Chilton Trinity Ponds were undertaken. A contract was let to compile an inventroy of NRA landholdings with existing conservation value or potential for enhancement.

Advice to all functions continued to be provided and guidelines are in draft to assist Flood Defences maintenance and consent staff in carrying out their work in an environmentally sensitive manner. Liaison with statutory and voluntary conservation bodies continued. Formal links were established with County Council ecologists. The Regional Advisory Board and NRA Chief Executive visited the RSPB Reserve of West Sedgemoor to gain first hand experience of the Somerset Levels. Investigations contined for the creation of conditions more suitable for breeding waders on the Levels and Moors.

A leaflet on Pollarding was produced; the River Corridor Survey leaflet was updated using contract staff. Health and Safety requirements for conservation staff were reviewed.

4(g) NAVIGATION

NRA Wessex Region is not responsible for any navigations within its area. However, it has been represented on a Working Group, together with County and District Councils and British Waterways Board, to investigate the possibility of creating a navigable waterways system of the order of 100Km in length in Somerset.

The system would include several main rivers and the Bridgwater-Taunton canal.

The Working Group concluded that a navigable system might be possible and that the sponsoring authorities should consider whether feasibility studies costing fl.2 million should be pursued in order to assess the viability of the complete project.

Items which would be the subject of the feasibility studies would include:

- (a) availability of water (particularly in summer months;
- (b) impact and treatment requirements of foul water discharges;
- (c) pumping requirements for surface water discharges;
- (d) siltation;
- (e) errosion of flood banks;
- (f) effect on flora and fauna;
- (g) passage of fish and elvers;
- (h) exacerbation of flooding and drainage problems;
- (i) ownership of land;

- (j) maintenance of navigation;
- (k) passage of floods;
- (1) quality of water (including salinity);
- (m) modifications to structures;
- (n) new structures required;
- (o) boating facilities;
- (p) consideration of other river users.

Fundamental to the project would be the construction of a tidal barrage on the River Parrett downstream of Bridgwater. Differing water levels in the various rivers and watercourses would necessitate the construction of eighteen locks.

The Working Group's initial report is to be given formal consideration by the six participating bodies.

5 CROSS FUNCTION AND SUPPORT SERVICES REVIEWS

5(a) ADMINISTRATION

The Regional Headquarters of NRA Wessex Region was relocated. The new head office was officially handed over on 15 December 1989. The transfer of staff, furniture etc took place in early February 1990 (over one long weekend). All was achieved within plan.

An Office/Depot at Twerton, an asset inherited under the statutory scheme of transfer, was refurbished to become the Bristol Avon Area Office and main depot.

The purchase, design and furnishing of the new Avon and Dorset Area Office at Blandford commenced in 1989-90 and completion with staff moved is planned for June 1990.

Office systems were separated from those of Wessex PLC including Wordprocessing, communications and library. All were achieved by February 1990.

5(b) LEGAL SERVICES

A new legal unit was set up in December 1988 within the Shadow NRA, with a new staff and resources. Approval was given to recruit an additional solicitor in July 1989 but recruitment problems have meant that this will not be achieved until the new financial year. A legal secretary was successfully recruited in December 1989 adding significant strength to the unit. Once recruitment is complete most legal work will be dealt with in-house.

The formulation of the Statutory Scheme of Transfer consumed much time and effort for approximately six months. The Wessex Scheme was successfully delivered for signature by the Secretary of State for the Environment by the due deadline of 31 August 1989. Post-Scheme conveyancing, temporary agreements and contracts with the Wessex Water plc are still being dealt with.

Some 30 outstanding pollution prosecutions were inherited from the Water Authority and 50 were brought in 1989/90. There has been an encouraging increase in fines and costs awarded by the local Magistrates. In fact these have more than doubled from the previous figures, ie average fine f748.00 average legal costs f175.00 and average scientific costs f401.00. In general local companies have suffered the most, particularly on repeat prosecutions. It is quite clear that more frequent visits to Court establishes a better relationship between the NRA and the Courts and provides the best opportunities for developing the educational side of the NRA's work. In addition, it is clear local Magistrates know what is happening locally and fully support the NRA in general.

No cases have yet been taken to the Crown Court, although there have been two Appeals Against Sentence. The Regional Legal Unit took over responsibility for one Area's fishery prosecutions together with any contested matters, salmon poaching and elver licensing matters.

5(c) ESTATES MANAGEMENT

The main thrust of work during the year was associated with acquiring and setting up new offices and depots throughout the region. Possession was taken in February 1990 of the new Regional Headquarters building at East Quay, Bridgwater. This comprised accommodation of 33,500 square feet. March 1990 saw the completion of the first phase of the new Avon and Dorset Area Office and Depot at Sunrise Business Park, Blandford Forum. The second phase is due for completion at the end of May. Once completed, the total site area will be approximately 2 acres on which will stand a two storey office comprising accommodation of 13,500 square feet, four general purpose depot buildings each of 1,700 square feet and a large open storage area for heavy plant and materials.

A start was made on establishing a property maintenance programme for the region's residential properties, although initially there will be a high capital expenditure requirement as some of the properties need to be upgraded to an acceptable standard.

As had been the practice with the predecessor Water Authority, Auction Sales of Grass Licences are arranged in April. In 1989 two Sales were arranged, each of 20 lots when over 400 acres of grass along the river banks of Somerset were sold. In addition, approximately 150 acres are sold by Tender.

Much time continued to be devoted to capital schemes, obtaining land entry, preparing Records of Condition and negotiating Compensation Claims. Having to take over work of schemes currently in progress, which had not previously been handled by the current Estates staff proved an interesting experience. However, the transition went reasonably smoothly and full familiarity has now been gained with owners/occupiers and their agents on capital schemes along the south coast.

Some minor rent reviews were undertaken in respect of fishing licences, boreholes and gauging stations, and it will be interesting to see how rental figures are affected in the light of changing circumstances.

5(d) PUBLIC RELATIONS

The primary objective during the year was to establish the identity of the NRA as guardians of the water environment in the Wessex Region.

Considerable effort was put into establishing contacts with representatives of the news media in the region, both by informal meetings and invitations to major events. The strategy adopted involved three main aspects:

- (a) Whenever appropriate, press releases were issued relating to newsworthy activities.
- (b) A number of major planned media events were organised with a view to obtaining maximum coverage and highlighting the NRA. Such events included the successful initial launch of the NRA on 1 September which was held on the SS Great Britain in Bristol and subsequent events in Bristol and Poole highlighting the survey vessel, Vigilance.
- (c) Efforts were also made to maximise coverage of unplanned events such as the flooding emergencies over the winter months when television film crews visited the Regional Control Room.

The Public Relations section was responsible for the production of the RRAC Newsletters which were circulated widely following the two RRAC meetings.

In addition to externally targetted activities, the importance of the region's staff as ambassadors for the NRA was recognised. All staff attended an intensive one day 'NRA Forum' aimed at ensuring the mission of the NRA was clearly understood and to promote a corporate identity. The regular circulation of a Regional Newsletter for staff (Riverwise) was also initiated.

5(e) PLANNING

i) Corporate Planning

A framework for Corporate Planning within the region was established and the first Corporate Plan submission produced in accordance with Headquarters' guidelines. The production of the regional submission involved contributions from all function departments.

Following notification of the region's grant in aid allocation for the coming year, objectives and targets for the coming year were finalised. Action Plans have been drawn up for the achievement of targets identified in the Plan.

Key targets have been incorporated in personal targets for senior managers and action points delegated to other staff through the Performance Appraisal system operated within the region.

ii) Emergency Planning

Emergency procedures inherited from Wessex Water Authority were reviewed and modified to reflect the needs of the new NRA organisation. Where necessary, liaison arrangements were clarified or re-established. The revised procedures were successfully applied in the recent flooding events.

iii) Planning Liaison

4300 planning consultations were dealt with during the year.

Planning Authorities were kept informed of the changes leading up to the formation of the NRA and good liaison has been maintained. Procedures and guidelines were refined in a number of areas to enhance protection of the water environment.

5(f) RESEARCH AND DEVELOPMENT

Research projects concerning the movement of salmonids in relation to flow (Hampshire Avon and Dorset Frome) and the hydrological regime of Somerset wetlands which were initiated in previous years have continued. In the case of the former, the low flows of 1989 produced conditions under which very useful data was collected. In the case of the latter, reports are in preparation.

Members of the region's staff contributed to the development of the NRA's future R&D programme including undertaking topic reviews in assigned areas.

5(g) INFORMATION SERVICES

i) <u>Hardware</u>

During the year, a number of additions were made to the region's existing DEC VAX 3600 minicomputer. Notably a DEC VAX 3400 was commissioned to provide back-up to the existing machine and a number of PC and portable computers were purchased to support specific applications.

During February, all computer hardware was moved to the new Regional Headquarters office building and successfully recommissioned.

ii) Software

Following a policy towards independence from bureau services, a number of software systems operating on the DEC VAX machines or stand-alone machines were implemented. These included CAD, payroll, bonus system, purchasing, stores and general accounting.

A bureau service remains for technical systems including the water quality archive, rainfall, river flow archive, abstraction licensing system and the discharge consents and Water Act Register systems. However, a strategy for the transfer of these systems to in-house facilities was developed and approved.

iii) Communications

As part of the office move, a new communications network between Regional Headquarters and area offices was implemented. This provides an integrated system for computer data, voice and radio.

5(h) PERSONNEL

i) Employee Relations

Informal meetings were held satisfactorily during the year with both manual and non-manual employee representatives. Good co-operation was also achieved with relevant Unions in the appointment of shop stewards/staff representatives to meet the needs of Wessex. There were no major employee relations difficulties.

ii) Recruitment

The majority of appointments were completed to the structure, and no significant difficulties experienced during the year, with the exception primarily of Engineers. Staff turnover was relatively low, although some problems were experienced in retaining graduates.

iii) Training

An annual training needs appraisal of all employees was carried out, and the subsequent training programme substantially accomplished. Additional training carried out included Management Team building, and also basic first aid training of all employees.

iv) Health and Safety

Co-operation and support was given to the Unions, to assist them with the appointment of adequate numbers of Health and Safety representatives. Subsequently arrangements were made and satisfactorily completed for training the representatives. No formal Health and Safety Committee has as yet however been established. Substantial progress was made in COSHH training.

v) Remuneration and Benefits

Structure grades were held satisfactorily throughout the year, with no major anomalies or inconsistences arising. Appropriate regional allowances were reviewed and amended as necessary. There were no other significant changes to the remuneration or benefits of Wessex employees.

5(i) FINANCE

A number of major projects were undertaken, the most notable of which were:

- (a) The division of the assets and liabilities of the Water Authority including the formulation of a suitably split balance sheet between its successor bodies, Wessex PLC and NRA.
- (b) The cash settlement between the PLC and the NRA for the first five months operation.

(c) The separation of all financial systems and the implementation of new PC based financial systems including purchasing, purchase ledger, payments, billing and sales ledger, general ledger and payroll. All were achieved by January 1990.

Other ongoing financial activities were to set charges for 1990-91 in respect of Flood Defence Levies and Abstraction Licence Charges. The Corporate Plan was completed in accordance with the specified timetable including the various re-iterations of the financial tables. A 'Star' Chamber exercise was held to test the region's Corporate Plan bid, following which a bottom line allocation of grant in aid for 1990-91 was notified which will permit a modest increase in resources.

5(j) OTHER SUPPORT SERVICES

i) Regional Control Centre

An out-of-hours service was taken during the year from Wessex Water PLC Control Centre. The contract terminates in April 1990 and a 24 hour NRA Control Centre will be established in the Bridgwater Regional HQ offices. Controllers were interviewed and appointed at the end of 1989-90.

ii) Telemetry

Three Area telemetry systems are being converted into one regional telemetry system based upon Vax computers and Servolec outstations. It is programmed to have the integrated system in operation by June 1990.

iii) Communications

Communications within the region are provided by Open Channel Private Mobile Radio (PMR).

The system provides reasonable cover over the region but is shared with Wessex PLC.

Equal control rights and system resilience have been provided by the installation of a microwave aerial mast and transmitter building on the RHQ site. The system is enhanced by a number of cellular telephones. An interest in being involved with any new system has been expressed to the PLC. A provisional sum of £900K has been budgeted to cover a 25% share in any new system.

iv) Plant. Transport and Stores

Reciprocal arrangements with Wessex Water PLC exist for the servicing of vehicles. The region has one Transport Servicing Depot as well as a Regional Stores at Bradney near Bridgwater. Heavy plant is serviced at Bradney and other servicing is a combination of in-house and contract.

A catalogue of stores items can be obtained from the main store and stores are provided from that location or direct purchase according to circumstances.

REGIONAL COMMITTEE AND BOARD MEMBERS

WESSEX REGION

Regional General Manager - N F Reader
Regional Board Member - The Lady Digby DL

REGIONAL RIVERS ADVISORY COMMITTEE MEMBERSHIP AS AT 31 MARCH 1990

Nominating Bodies	Member
Chairman (Appointed by NRA)	P W Lacey
National Farmers Union Country Landowners Association	R C Adlam E J H Cameron
South Western Council for Sport and Recreation/Central Council for Physical Recreation/British Canoe Union	Lt Col J V Cornwell
CCPR/Inland Waterways Association	T Rymell
Salmon & Trout Association National Anglers' Council CCPR	D Gifford
British Sports Association for the Disabled	Miss N McMahon
Wessex Water	C F Skellet
Water Companies Association	J R Little
Confederation of British Industry	K Green
Nature Conservancy Council	M J Hudson
Countryside Commission	Miss W Pettigrew
Dorset Trust for Nature Conservation	A Swindall
Council for the Protection of Rural England	E Potter
Dorset County Council	Capt I A Campbell

Christchurch Borough Council

Salisbury District Council

Somerset Association of Local Councils

NRA

NRA

NRA

Secretary

Capt J Lofts

Mrs P Stocken

Mrs I H Peckham

Major J M Mills

R H Baker

The Lady Digby DL

Mrs M C Halstead

REGIONAL FISHERIES ADVISORY COMMITTEE MEMBERSHIP AS AT 31 MARCH 1990

CHAIRMAN

MAJOR J M MILLS OBE TD JP DL

SALMON

CAPT P GREEN MC

FISHERMEN

MAJOR D A C RASCH

TROUT

R CORBETT ESQ

FISHERMEN

BRIG S N FLOYER-ACLAND CBE DL

D GIFFORD ESQ

DR H I S THIRLAWAY

RESERVOIR TROUT

FISHERMEN

R HARRISON ESQ

COARSE FISHERMEN

M J STOODLEY ESQ

G A TOPP ESQ

K W LACEY ESQ

J J MATHRICK ESQ

K HALL ESQ

V D TYRRELL ESQ

J S PARKER ESQ

FLOOD DEFENCES

L H AMES ESQ

SIR STEPHEN HAMMICK BT

S W COUNCIL FOR SPORT AND RECREATION **Vacancy**

NRA

P W LACEY ESQ

R H BAKER ESQ

REGIONAL FLOOD DEFENCES COMMITTEE MEMBERSHIP AS AT 31 MARCH 1990

CHAIRMAN

APPOINTED BY MAFF

R H BAKER

MAFF APPOINTMENTS

S H CHEDZOY (also Chairman of Somerset Local Flood

Defence Committee)

J B BUSH JP (also Chairman of Bristol Avon Local

Flood Defence Committee)

R WILLIS (also Chairman of Avon and Dorset Local

Flood Defence Committee)

AVON COUNTY COUNCIL

G S MORRIS

J WYATT

T E TURVEY OBE

DORSET COUNTY COUNCIL

G E HINE

REAR ADMIRAL G I PRITCHARD CB

SOMERSET COUNTY

COUNCIL

P COOKSON

WILTSHIRE COUNTY

COUNCIL

A G PHILLIPS OBE

NRA

MAJOR J M MILLS OBE TD JP DL

P W LACEY

SENIOR OFFICERS AND PROFESSIONAL ADVISERS

SENIOR OFFICERS

Regional General Manager - N F Reader
Flood Defences Manager - B A Tinkler
Catchment Planning Manager - M G Booth
Catchment Control Manager - D J Palmer
Fisheries, Recreation and Conservation Manager - A J R Barber
Finance and Administration Manager - N Gupta
Legal and Estates Manager - G Griffith (Ms)

Personnel Manager - T Pleass Public Relations Manager - P Hewett

PROFESSIONAL ADVISERS

LEGAL

Solicitors: Clarke, Willmott and Clarke, Taunton

Platels, Bath

Hawks and Schofield, Burnham-on-Sea

Counsel: Nigel Pleming

Robert Beecroft Robert Duval Nicholas Harwood

David Spens

ESTATES

Surveyors: Chestertons, Bristol and Taunton

Gribble Booth and Taylor, Williton

Bruton, Knowles, Taunton

FLOOD DEFENCES

Consulting Engineers: Binnie and Partners, Chester

Professor I D Cluckie, Salford C H Dobbie and Partners, Bridgwater Hydraulics Research Ltd, Wallingford Sir William Halcrow & Partners, Swindon

Watson Hawkesley, Bridgwater

Mander, Raikes and Marshall, Taunton Lewin Fryer and Partners, Richmond John Taylor and Sons, Plymouth

L G Mouchel, Bath

Frank Graham and Partners, Exeter Posford Duvivier, Peterborough

Lawrence Gould Consultants Ltd, Warwick

FISHERIES

David Solomon, Salisbury

CONSERVATION

Denise Exton, Dorchester

WATER RESOURCES

Hydrotechnica, Shrewsbury Kim Jones, Bridgwater

AUTHORITY PUBLICATIONS AND PUBLICITY MATERIAL

Guardians of the Water Environment (Regional Brochure and Regional Leaflet)

Objectives and Target Standards of Service

Angling Guides - Bristol Avon Area
Somerset Area
Avon and Dorset Area

Pollarding - Information Leaflet

Buyer Beware - Leaflet on Salmon Poaching

Leaflets relating to:

Coastal Management Conference and Exhibition May 1989 National Angling Championships September 1989

RRAC Newsletter (2 issues)
Riverwise (Regional Staff Newsletter) (5 issues)

RESEARCH CONTRACTS AND PUBLICATIONS

West Sedgemoor Hydrological Studies

Contractor: Institute of Hydrology

Report: In preparation

Hampshire Avon and Dorset Chalk Streams - Investigation of migratory salmonid movement in relation to flow

Contractor: Dr David Solomon

Report: Investigation not yet complete