

The Open College/The National Rivers Authority  
Nottingham Trent University Certificate in Management

AN APPRAISAL OF THE OPTIONS  
FOR THE STRUCTURE  
OF THE WATER RESOURCES FUNCTION  
IN THAMES REGION NRA.

S.M. HUNTER  
SENIOR HYDROGEOLOGIST

November 1994

The Information Centre  
National Rivers Authority  
Waterside Drive  
Aztec West  
Almondsbury  
Bristol BS12 4UD

Due for return

<del>3-5-95</del>	
11/7/95	
22/8/96	

ENVIRONMENT AGENCY



055681

National Rivers Authority  
Information Centre  
Office

Class No .....

Accession No A07C

## EXECUTIVE SUMMARY

NRA Thames Region was recently restructured on an area management basis. In addition to the three multifunctional areas, two Regional Scientific/Technical departments were created. Many functions within Thames Region were split into operational areas but it was agreed that Water Resources would initially remain at the centre and Water Resources liaison staff (Water Resources Officers) were appointed to interface between the Areas and the Water Resources function centrally.

The aim of this project was to examine whether, in terms of customer service and cost effectiveness, it would be better for the Water Resources function in Thames Region to remain a single centrally based unit or to be split and follow other functions to become area based.

A series of interviews was carried out with Senior Managers, Section Heads, Area officers and other members of Water Resources to obtain background information on the decision to become area based, details of key tasks with current responsibilities, current resourcing and standards of service. To analyse the service currently provided to internal customers and the impact of any change to the Water Resources structure on that service, a questionnaire survey was carried out.

The current structure in terms of responsibilities and resourcing are examined. An alternative structure based on three area teams and a central team is proposed and the resourcing required is identified. Of most importance is the requirement for three additional members of staff to implement the latter option.

The two options are then compared in terms of financial implications, people and management issues and impact on customer service.

The investigations show that any improvements over and above current performance which would be gained by a move to area management would be small compared to

the decrease in efficiency caused by the employment of three more staff.

The conclusion drawn from the investigation is that, in terms of customer service and cost effectiveness, it would be better for the Water Resources function in Thames Region to remain a single centrally based unit rather than to be split and follow other functions to become area based.

1.	Introduction . . . . .	7
1.1	Terms of Reference . . . . .	7
1.2	Background . . . . .	7
1.3	Scope . . . . .	9
1.4	Methods of Investigation . . . . .	11
1.5	The Environmental Agency, ENVAGE . . . . .	13
2	An Analysis of the Current Situation . . . . .	14
2.1	Water Resources Function . . . . .	14
2.2	Current Regional Structure . . . . .	19
2.3	Accommodation . . . . .	21
2.4	Resourcing . . . . .	21
2.4.1	People . . . . .	22
2.4.2	Information . . . . .	24
2.4.3	Capital Equipment . . . . .	25
2.4.4	Local Area Networks in Thames Region . . . . .	28
2.5	Customer Service . . . . .	29
2.5.1	Internal Customer Profile . . . . .	29
2.4.2	External Customer Profile . . . . .	33
2.4.3	Standards of service . . . . .	35
3	The Option For Change . . . . .	39
3.1	Alternative area based structure . . . . .	39
3.2	Accommodation . . . . .	42
3.3	Resources . . . . .	44
3.3.1	People . . . . .	44
3.3.2	Information . . . . .	45
3.3.3	Capital equipment . . . . .	46

4	Comparison of Options . . . . .	48
4.1	Financial Implications . . . . .	48
4.1.1	Staff . . . . .	48
4.1.2	Accommodation . . . . .	50
4.1.3	Capital Equipment . . . . .	52
4.2	People issues . . . . .	54
4.2.1	Changing Roles and Responsibilities . . . . .	54
4.2.2	Training . . . . .	55
4.2.3	Specialist Expertise . . . . .	55
4.2.4	Relocation . . . . .	56
4.2.5	Recruitment . . . . .	56
4.3	Management Issues . . . . .	56
4.4	Impact on customer service . . . . .	58
4.4.1	Internal Customers . . . . .	58
4.4.1	External Customers . . . . .	62
5	Conclusions . . . . .	64
6.	Recommendations . . . . .	65

## **List of Figures**

- Figure 2.1    Current Regional Structure**
- Figure 2.2    Thames Region Offices**
- Figure 2.3    Internal Customer Profile**
- Figure 2.4    Services Provided**
- Figure 2.5    Region and Area Water Resources Contacts**
- Figure 4.1    Overall Service**

## **List of Tables**

- Table 2.1    Licensing Key Tasks**
- Table 2.2    ALF Key Tasks**
- Table 2.3    Hydrogeology Key Tasks**
- Table 2.4    Staff within Water Resources**
- Table 2.5    Hardware and Software held by Water Resources Regionally**
- Table 2.6    Extent of Services provided to External Customers**
- Table 4.1    Salaries for New Staff**
- Table 4.2    IT Equipment**

## **List of Appendices**

- Appendix 1    Questionnaire Survey**
- Appendix 2    Quarterly Achievement Report, 1993/94**
- Appendix 3    Accommodation Costs**
- Appendix 4    Definition of Area and Central Roles**

## **1. Introduction**

### **1.1 Terms of Reference**

A number of functions within Thames Region NRA are currently split into three operational areas. This project examines whether it is better, in terms of customer services and cost effectiveness, for the Water Resources section to remain central or to follow other functions and become area based. In 1996 the NRA will become part of a national Environmental Agency (ENVAGE) and it is expected that the recommendations made in this report will be considered by NRA Senior Management for implementation at that time.

### **1.2 Background**

In 1989 the National Rivers Authority was formed from ten different water authorities. The resulting regional structures displayed many different methods of achieving the same objectives and, although to some extent local needs require local solutions, for a national organisation the NRA displayed too wide a range and variety.

In early 1991, a pilot management audit was carried out in Thames and Welsh Regions by the consultants Coopers and Lybrand. The findings and recommendations from the audit in these regions provided a sound base for the identification and development of appropriate structures, systems and processes for the NRA as a whole. An internal review of the Thames Region structure was then carried out and three of the main recommendations of the review, produced in November 1991, were as follows :

- i) The Region should organise its Operational Activities into three areas with co-terminus boundaries for all functions.
- ii) A structure should be introduced which incorporates strategic level multifunctional planning and therefore links 'Catchment Planning' needs more directly to multifunctional planning.
- iii) There should be improved integration of functions and communications within areas.

The boundary changes as defined in i) were made effective from 27th April 1992 and the new areas were designated West, North East and South East. Then, in late 1992, the new Chief Executive carried out a review of structure and systems within the NRA nationally which identified a requirement to increase the emphasis on integrated catchment management. Following on from this, the Executive Group decided on 17th November 1992 that all regions would be organised on an area management basis giving those area managers responsibility for integrated functional management. The proposals for the restructuring were:

- i) that the regions would operate through twenty six area offices to provide and deliver service at a level closer to the local population,
- ii) that management structures across the regions would be changed to achieve greater consistency although not total uniformity in order to meet local requirements,
- iii) Area offices were to be a service delivery entity drawing specialist support from their regional offices or from a national centre,
- iv) the Authority must maintain its effectiveness whilst improving efficiency.

As a result of the final point, the Executive Group agreed that appropriateness of function would determine the level of resource deployment, eg. generally it would be



considered inappropriate for Public Relations, Legal, Finance and Procurement specialists to be located at area offices, whilst it would normally be the case to employ pollution control, abstraction enforcement and other operational activities at the area level. In the case of consent and abstraction licensing it would be essential to examine the economies of scale in response to local needs.

In summary, the objectives of the changes were:

- i) improved delivery of local services,
- ii) improved efficiency and
- iii) a method of achieving a smooth transition to the Environment Agency.

The basic premise was to place in the areas as much work as could be devolved sensibly whilst retaining at the centre policy matters and the work of groups too small to be divided into areas.

In Thames Region, three Area Manager positions were created to manage the new co-terminus areas. In addition to the three multifunctional areas, two regional Technical/Scientific departments were created. Many functions within Thames Region were split into operational areas but it was agreed that Water Resources would initially remain at the centre and Water Resources Officers were appointed in each area to liaise between the areas and the Water Resources function centrally.

### 1.3 Scope

The management of Water Resources in Thames Region is currently divided between Water Resources Strategy, Hydrological Services, Abstraction Licensing, Hydrogeology and Alleviation of Low Flow (ALF) Schemes. Water Resources

Strategy is concerned with the sustainable and cost effective management of water resources within Thames Region. The section carries out a strategic planning role and clearly must remain central. Hydrological Services is divided into Hydrology and Hydrometry. The Hydrometry Section is currently undergoing market testing and could not be included in the study. Within Hydrology, general hydrological support and advice can be provided in the areas as is done already by the area Water Resources Officers but the management and running of the data archive is a centralised task.

Water Resources Strategy is clearly a central function and the migration of the whole of Hydrological Services to the areas is beyond the scope of this study. For the purposes of this project, therefore, included in Water Resources are Abstraction Licensing, Hydrogeology and ALF. In contrast with other NRA regions, Groundwater Quality in Thames Region is separate from the Water Resources function and has already been reorganised. The central unit is now part of the Scientific Department and three area teams of hydrogeologists report to the area Environmental Services Managers.

Within the definition of Water Resources as given above, one alternative structure for the Water Resources function is presented. Further options could be designed in which the whole of Hydrological Services is moved to the areas and also the Groundwater Quality hydrogeologists are brought into the area Water Resources team. This would increase the scope for multifunctionality but the creation and analysis of all such options is beyond the remit of this project.

The two options to be considered, therefore, in assessing customer service and cost effectiveness are a) the current regionally based Water Resources structure and b) the creation of three area teams and a central unit, including Abstraction Licensing, Hydrogeology and ALF.

#### **1.4 Methods of Investigation**

A series of interviews was carried out with Senior Managers, Section Heads, area officers and other members of Water Resources. Information was obtained on the decision to become area based, details of key tasks with current responsibilities, current resourcing and standards of service. Information was also obtained from the IT Group on the status of Thames Region's local area networks and from Finance, Office Services and Estates on the cost and availability of accommodation.

A questionnaire was sent to the main internal customers of Water Resources, forty three in total. The questionnaire covered

- i) the current service provided by the single regionally based team,
- ii) the role of the Water Resources Officers,
- iii) the knowledge of and potential use of the Water Resources database,
- iv) impact on the service provided if Water Resources was to become area based and
- v) customer opinion of the best option.

Thirty five customers (81 %) completed and returned the questionnaire within the time available. The analysis is, therefore, based on the responses of these thirty five customers. Appendix 1 contains a copy of the questionnaire and a summary of the customer responses.

To survey external customers would have been a difficult and costly exercise. Instead, to assess the service provided to these customers, the standards set out in the NRA's Customer Charter have been referred to together with operational standards and performance measures.

### 1.5 The Environmental Agency, ENVAGE

In 1991 the Prime Minister announced that, subject to Parliamentary approval, a new Environmental Agency would be set up to bring together the key regulatory pollution control functions affecting air, land and water. After public consultation, the Government decided that the Agency should bring together all the functions of the NRA, Her Majesty's Inspectorate of Pollution and the waste regulation functions of local authorities to form an integrated body. The proposed timetable for the Agency was for a paving bill to be introduced to Parliament in July 1994, the Agency Bill to be passed in the 1994/95 Parliamentary programme and the Agency to be established by July 1995. However, on 20th July 1994 the Government announced that it intends to proceed to implement the new Environmental Agency through substantial legislation to be introduced in the next Parliamentary session rather than through a paving bill. This will probably lead to some delay to the original timetable with the target date for the new Agency now being 1st April 1996.

The NRA's view of the organisational structure is that the Agency should have an integrated Head Office policy unit, with regional and sub-regional operational units, that is areas based on river catchment boundaries. One of the reasons for the present structural changes is that they would enable a smooth transition from the NRA to ENVAGE.

## 2 An Analysis of the Current Situation

### 2.1 Water Resources Function

Within the scope of this study, Water Resources includes Abstraction Licensing, ALF and Hydrogeology. Abstraction Licensing is involved in the granting of abstraction and impounding licences under the Water Resources Act 1991. ALF involves the development of schemes to restore flows to rivers which have been severely depleted by the over abstraction of groundwater. The Hydrogeology Group works on developing the understanding of groundwater resources which occur in the extensive and geologically varied aquifers of Thames Region. 42% of water abstracted for public supply is from groundwater in this region and pressure on water resources for public supplies, industry, navigation and recreation is very high.

The key tasks within each group were identified together with current areas of responsibility, ie. regional or area, and these are given in Tables 2.1 - 2.3.

Table 2.1 Licensing Key Tasks

Licensing Key Tasks	Current Responsibilities		Possible Responsibilities	
	Regional	Area	Regional	Area
Processing licence applications from initial contact with customer through to preparation of Determination Report	✓			✓
Development of licensing policy	✓		✓	

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

Licensing Key Tasks	Current Responsibilities		Possible Responsibilities	
	Regional	Area	Regional	Area
Setting charges	✓		✓	
Set enforcement criticality	✓		✓	
Maintain Public Register	✓		✓	
Provide comment on planning applications and catchment management plans	✓			✓
Represent Region on National Group	✓		✓	
Monitor enforcement in areas	✓		✓	
Provide general advice on licensing to individuals and representative groups	✓			✓
Deal with solicitors enquiries re land and property	✓			✓
Collate and provide information to consultants	✓			✓
Issue two part tariff agreements to spray irrigators	✓			✓
Send out S.201 return forms to abstractors	✓			✓
Verify and archive return form data on WABS	✓			✓
Provide S.201 data for H.O	✓			✓
Initiate appropriate follow up action for returns indicating over abstraction	✓			✓
Low flow enquiries	✓	✓		✓
Licence enforcement		✓		✓

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

Table 2.2 ALF Key Tasks

ALF Key Tasks	Regional	Area	Regional	Area
Preparation of Project Proposals	✓			✓
Consultation with Water Companies on feasibility and costs	✓		✓	
Maintaining a multi - functional and consistent approach to all projects	✓		✓	
Estimating of costs and regular monitoring of costs and progress	✓			✓
Preparation of terms of reference and liaison with internal and external parties throughout duration of projects	✓			✓
Acting as a focus for Public Relations on all ALF matters	✓			✓
Giving formal presentations to interest groups/societies	✓			✓
Application of tenderer selection processes	✓			✓

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

Table 2.3 Hydrogeology Key Tasks

Hydrogeology Key Tasks	Current Responsibilities		Possible Responsibilities	
	Regional	Area	Regional	Area
Hydrogeological input to groundwater abstraction applications	✓			✓
S.32 work - consent to analysis and recommendations to Licensing	✓			✓
Long term strategic planning of water resources	✓		✓	
Input to major NRA projects	✓		✓	✓
Guidance and liaison with Water Companies on major groundwater resource proposals	✓		✓	
Medium-long term management of specific NRA Water Resources projects eg. rising groundwater in London	✓		✓	
Groundwater Protection Zone Project Management including in house computer modelling of GPZ zones	✓		✓	
Provide mathematical modelling of the Region's aquifer systems	✓		✓	
Manage R&D projects	✓		✓	
Hydrogeological input to Catchment Planning	✓			✓
Hydrogeological input to ALF projects	✓			✓



An appraisal of options for the structure of the Water Resources function in Thames Region NRA

Hydrogeology Key Tasks	Current Responsibilities		Possible Responsibilities	
	Regional	Area	Regional	Area
Management of Observation Borehole capital project	✓			✓
Manage hydrogeological database	✓		✓	
Provide groundwater related enquiry/ information service to internal and external customers	✓	✓		✓
Provide a geophysical logging service	✓		✓	
Provide input or lead national initiatives	✓		✓	

## TECHNICAL DEPARTMENT - WATER RESOURCES BUSINESS

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

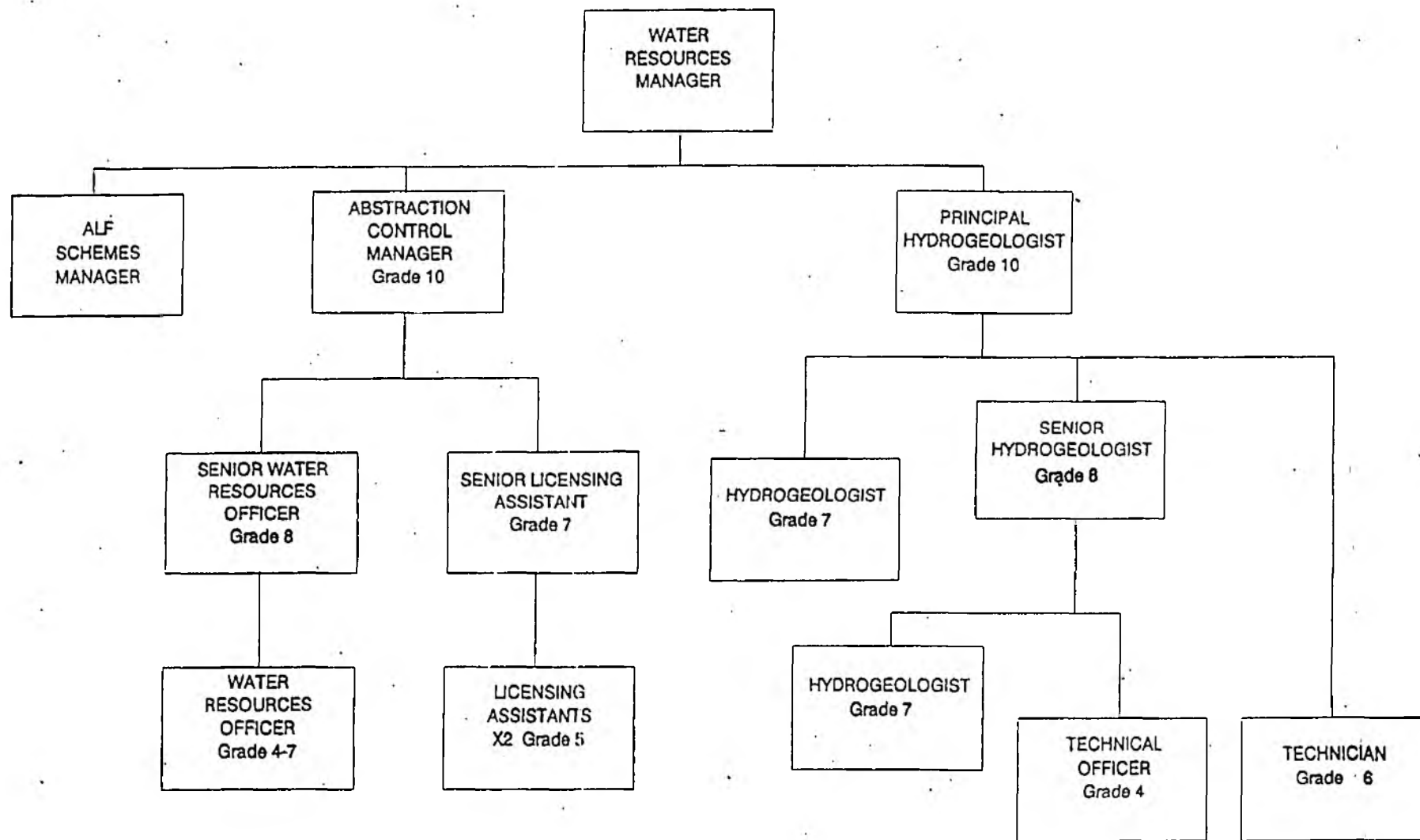
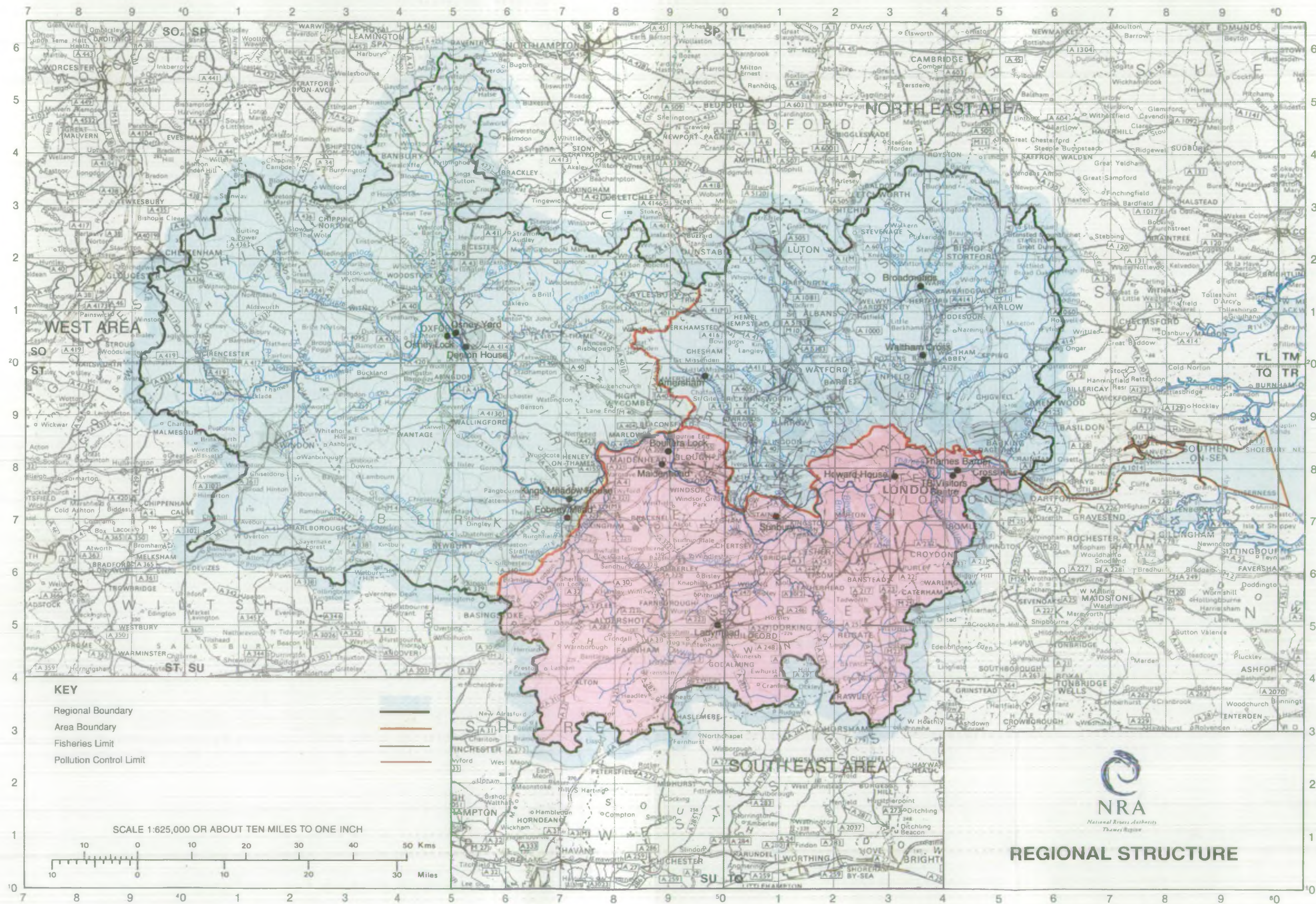


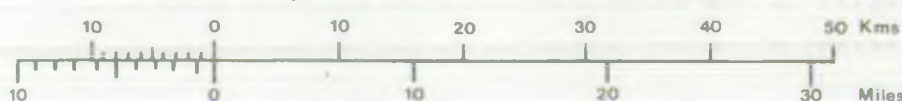
Figure 2.1





- KEY**
- Regional Boundary
  - Area Boundary
  - Fisheries Limit
  - Pollution Control Limit

SCALE 1:625,000 OR ABOUT TEN MILES TO ONE INCH



National Rivers Authority  
Thames Region

## REGIONAL STRUCTURE



### 2.3 Accommodation

Thames NRA Regional Headquarters are located in Reading. In West Area there are offices in Wallingford and Osney, the North East Area has offices at Waltham Cross, Rickmansworth and Broadmeads and South East Area has offices at Sunbury, Crossness, Guildford and in London. The location of all these offices within the Thames catchment area are shown in Figure 2.2.

The majority of Water Resources staff are centrally based in Reading. The limited number of area staff - WROs and Licence Inspectors - are based in Wallingford (West Area) and Rickmansworth (North East Area). The South East Area staff remain based in Reading. Additionally, the two WROs for West and North East Areas retain desks in the Hydrology Section at Reading spending approximately two days a week at the regional office.

### 2.4 Resourcing

Resources can generally be classified in the following categories : people, information, capital equipment and materials. The resources most important to consider in this context of potential restructuring are people, information and capital equipment and these are discussed below. The current situation within Thames Region regarding local area networks is also described.

Material resources within the Water Resources section include general office equipment and field equipment such as dipmeters, cameras, mobile phones. Detailed analysis of these material resources has not been carried out as office equipment is

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

generally proportional to staff numbers and associated costs can be included under 'people'. The field equipment is relatively inexpensive and additional items can easily be purchased where required.

#### 2.4.1 People

The current resourcing of Water Resources in terms of staff numbers is illustrated in Table 2.4. There are currently thirteen full time employees regionally based in Reading, (six in Hydrogeology, six in Abstraction Licensing and one in ALF). Of the area staff, there are three Licence Inspectors and three WROs. The WROs spend up to 95% of their time on area water resources work. Their contribution to regional Hydrology work is, therefore, very limited and for the purposes of the study it is assumed that there are six FTE working in Water Resources in the areas. The total number of staff currently working in Water Resources, therefore, is nineteen.

Table 2.4 Number of Staff within Water Resources

Section	Number of staff
Hydrogeology	6
Licensing	6
ALF	1
WROs	3
Licensing Inspectors	3

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

The staff are distributed amongst the following grades<sup>1</sup> :

3 x Grade 10	Principal Hydrogeologist, Abstraction Control Manager, ALF Schemes Manager
5 x Grade 8	Senior Hydrogeologist, Senior Water Resources Officer, WROs
3 x Grade 7	Hydrogeologist, Groundwater Modeller, Senior Licensing Assistant
1 x Grade 4-7	Water Resources Officer
1 x Grade 6	Senior Technician (Geophysical Logging)
4 x Grade 5	Licensing Assistants, Licence Inspectors
2 x Grade 4	Technical Officer, Licence Inspector

All staff have more than three years' service with the NRA and many have considerably more (20 years+). Within the group there is a mix of professional, technical and administrative staff and many are experienced water resources, hydrogeology and hydrology specialists. Of particular value is the wealth of knowledge and experience of the hydrogeology of Thames Region built up over many years.

---

<sup>1</sup>The NRA introduced a new grading system in June 1994. As the system was introduced after the start of this project and there are a number of appeals against the new grades still to be decided, the old NRA grading system has been referred to in the text.

#### 2.4.2 Information

Large amounts of information are stored centrally within the Hydrogeology and Licensing Sections. The Hydrogeology database is one of the largest and most comprehensive of the eight NRA regions. It is a paper based system but much of the information, around 22,000 items, are computer catalogued. Some sets of information are also available in other departments, eg. Sites of Special Scientific Interest (SSSI) maps are held by Conservation, but the majority are held only in the Hydrogeology section and form a unique data set for the geology and hydrogeology of the Thames catchment.

The NRA is obliged by the Water Resources Act 1991 to provide a public register of licences, applications for licences and licence variations. This includes successions and licences that have been revoked or expired. Part of the public register includes the provision of reference maps showing the location of licences and applications. This is primarily a paper based system although some of the information is also held on computer and old records have been microfilmed.

All the information contained within both sections covers the entire Thames catchment. It is held and maintained regionally and, in addition to internal use, information is frequently provided from the database to a range of outside bodies. The public register of abstraction licences must be made available for public inspection at all reasonable hours and a visitors desk is provided in the Reading office.



Copies of all licences within West and North East Areas are available in the area offices at Wallingford and Rickmansworth respectively together with copies of the relevant licence maps. The regional office notifies the areas of any changes within four working days and the area Licence Inspector updates the maps and licences. Geological maps for the West Area are available in the Wallingford office for use by the WRO although they are held by the Groundwater Quality Protection team and located in a separate building. In North East area, the Groundwater Quality Protection team also have geology maps of their area but they are based in Waltham Cross and the WRO is based in Rickmansworth. Consequently a new set of geology maps have had to be purchased for the Rickmansworth site. The South East Area WRO can currently consult the database directly in Reading but there are sets at Crossness and Guildford for the Groundwater Quality staff.

#### 2.4.3 Capital Equipment

The hardware and software held within Water Resources regionally is listed in Table 2.5.

Table 2.5 Hardware and Software within Water Resources Regionally

Section	Hardware	Software
Hydrogeology	486/33	Wordperfect 5.1
	486/50	Freelance
	486/66	Symphony

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

Section	Hardware	Software
	386/25*	Lotus 123
	386/16*	dBASE IV
	HP Laser Jet II	Windows
	HP 7550 plotter	Hydrograph
		Flowpath
		Cardbox
		Wellog
		Groundwater Models
		Groundwater Programmes eg. Aqtesolv, Glover River Depletion
		Modflow
Licensing	486/33	Wordperfect 5.1
	286*	Freelance
	Canon LBP 8 II	Lotus 123
		Rapid File
		Windows
		Supercalc
		Symphony

\* Identified in the LAN Business Case to be upgraded to a 486, see Section 2.4.4 below.

The West Area WRO has a 486 PC connected to the Wallingford local area network and there is access via the ICL mainframe to the Groundwater Archive and flow data. The North East Area officer has similar access although at present through the use of another department's PC. A 486 PC has been ordered and will be installed in the near future. Both officers have access to a printer and in North East Area a plotter is also available.

Many of the packages listed in Table 2.5 have general applications such as Word Perfect and Lotus 123 but several are specific to the Water Resources group: Wellog, the geophysical log processing package; the mathematical models of the region's aquifer systems and groundwater programmes such as Aqtesolv; Flowpath, which is a package used by the NRA nationally for the Groundwater Protection Zone project; Hydrograph for accessing and plotting water level information and the Cardbox database which is used to store and access information on the Hydrogeology library. The Boreholes, Wells and Springs (BWS) database was originally held on the Prime system run by Thames Water Utilities. Updating was done by the Hydrogeology section and read only access was available in some area offices. It was taken off the Prime earlier this year and transferred to a dBASE IV system on a PC in the Hydrogeology section. Up to date information from this system is provided to the areas on request. Until Technical Department is connected up to the regional wide area network, access is available to the Hydrogeology Section only.

In addition to the above, the Licensing Section currently have to rely on Thames Water for their licence database and billing system. The Water

Abstraction and Billing System (WABS) is still on the Prime, although this is currently under review. The need for an abstraction licence database was first defined in 1991 and the national abstraction licence database (NALD) project was initiated in 1993. A number of problems were experienced and the project was suspended in March 1994. A review is now under way including a reappraisal of what is required of such a database and how it should be organised - the requirements for each region are very different for historical reasons. The review will result in recommendations being put forward on the preferred option, its cost and timescales. The results of this review should be implemented within the next 12-18 months.

#### **2.4.4 Local Area Networks in Thames Region**

Local area networks (LAN) are already set up throughout Thames Region but many user groups are not yet connected up to them. A business case was submitted in July 1994 by Technical Department RBH 6th Floor (including Hydrogeology, Abstraction Licensing and ALF) for connecting all the computers within the department to the Reading LAN. The proposal is currently with IT Group.

At Wallingford, the majority of staff, including the WRO, are already on a LAN. The business cases for Rickmansworth, Sunbury and Waltham Cross have been approved and all staff should be on a LAN by the end of this financial year.

## **2.5 Customer Service**

### **2.5.1 Internal Customer Profile**

#### Identification of customers

The internal customers of Hydrogeology and Abstraction Licensing cover seven different functions within the NRA : Groundwater Quality Protection, Conservation, Fisheries, Water Resources Strategy, Catchment Planning, Quality Regulation and Project Management. Of these, Conservation, Water Resources Strategy and Quality Regulation are regional functions with all staff based in Reading. The customers within Catchment Planning, Fisheries and Project Management are all area based and of the customers within Groundwater Quality Protection some are area and some are regionally based. Figure 2.3 illustrates the different functions to which Water Resources provides a service and at which offices the various customers are located.

In identifying the internal customers of Hydrogeology and Abstraction Licensing for sending out the questionnaire survey, it became clear that the majority, 77%, were carrying out area roles with 67% actually located in area offices (some South East Area staff remain in Reading as described above). Planning Liaison and Groundwater Quality Protection were identified as the most frequent customers, regularly contacting Hydrogeology and Abstraction Licensing more than once a week. Conservation and Fisheries are the least frequent, contacting the section less than once a month.

## Internal Customer Profile

Number of Customers

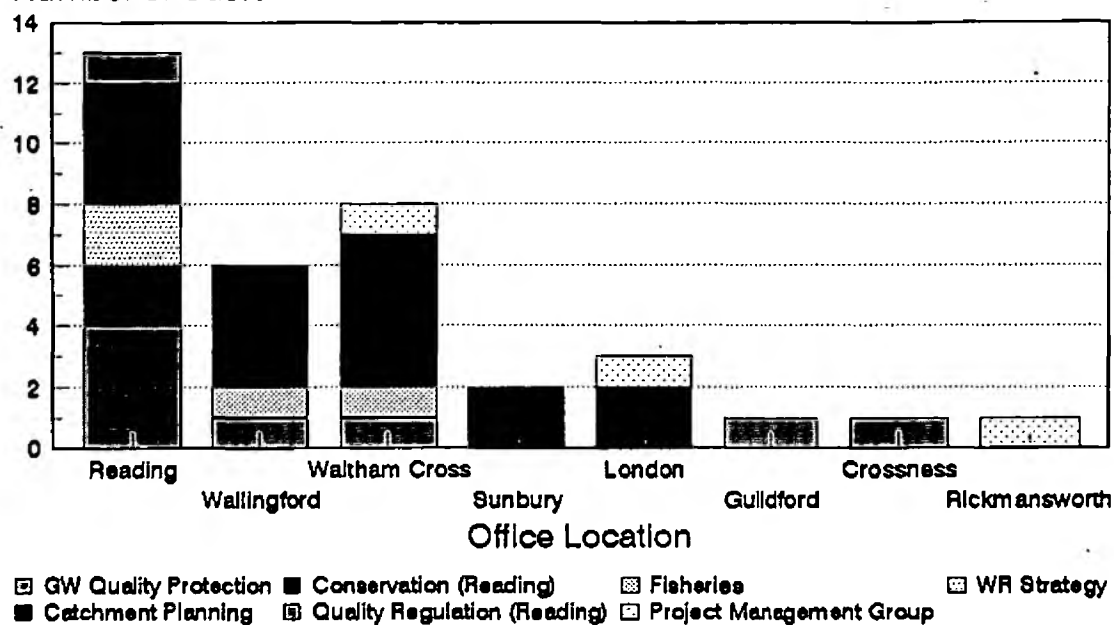


Figure 2.3

## Services Provided

Percentage of Customers

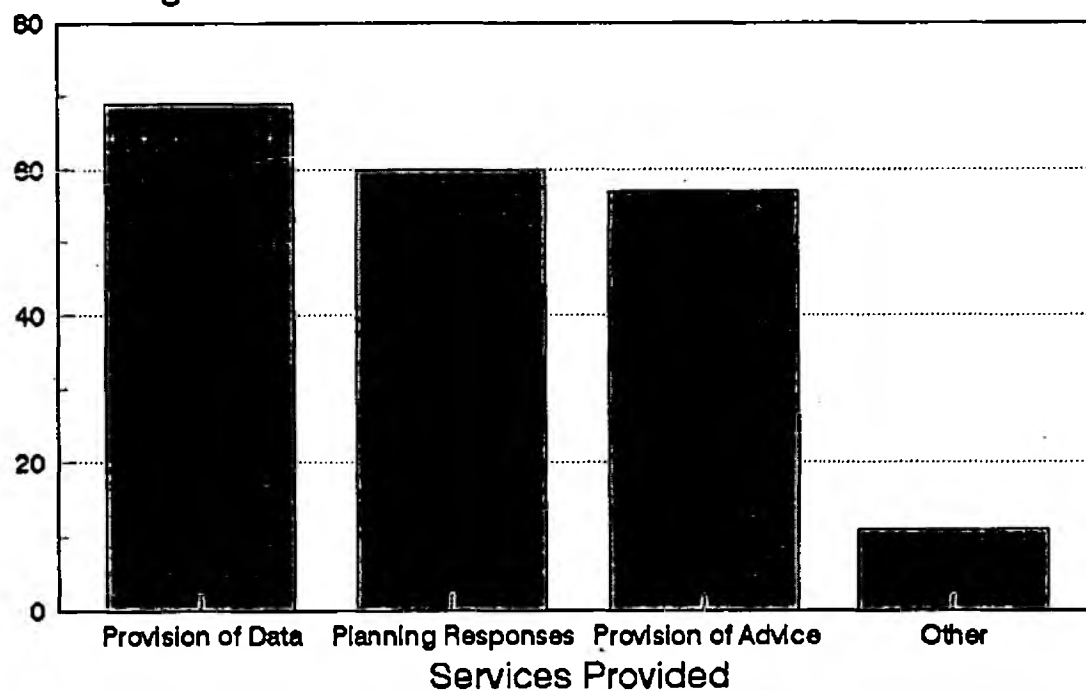


Figure 2.4

### Services provided

Figure 2.4 shows the types of service provided and the percentage of customers who use each service. The provision of geological, hydrogeological or licence data is clearly the service most frequently required, nearly 70% of customers using this service. The telephone and internal post are the most common way of requesting a service and 60% said they would use Electronic Mail when this became regionally available.

As stated in Section 2.4.3, copies of abstraction licences and the licence maps for the North East and West Areas are now kept in the area offices at Rickmansworth and Wallingford. Only 7% of customers perceived this to be of benefit to them in that they will be able to use the database personally. One area based customer, who agreed it would be of benefit, was unaware that the data was available in his office and two area based customers noted that it would obviously be of more benefit if the data were located in their area office ie. Waltham Cross not Rickmansworth and Sunbury not Reading.

The creation of the WRO posts twelve months ago was aimed at providing a Water Resources contact in the areas. Figure 2.5 demonstrates that the majority of internal customers, 54%, still contact the Hydrogeology and Abstraction Licensing Section on all water resources issues. The types of service required from the central Water Resources function and from WROs vary from customer to customer. It would appear that the WROs are contacted mainly for advice or input on local area issues ; the central team is consulted for strategic, policy and procedural information, geological data and use of the

BWS database. Where customers now contact the WROs on all issues, this is mainly because of convenience. There appeared to be no consistency in seeking input to Catchment Management Planning issues or local plans, obtaining licence information or for general queries and consultations ; both the central and area offices were contacted for these services. The general impression given by the responses is that customers see no clear division of roles. No clear guidance has been issued on the provision of Water Resources services since the creation of the WRO posts.

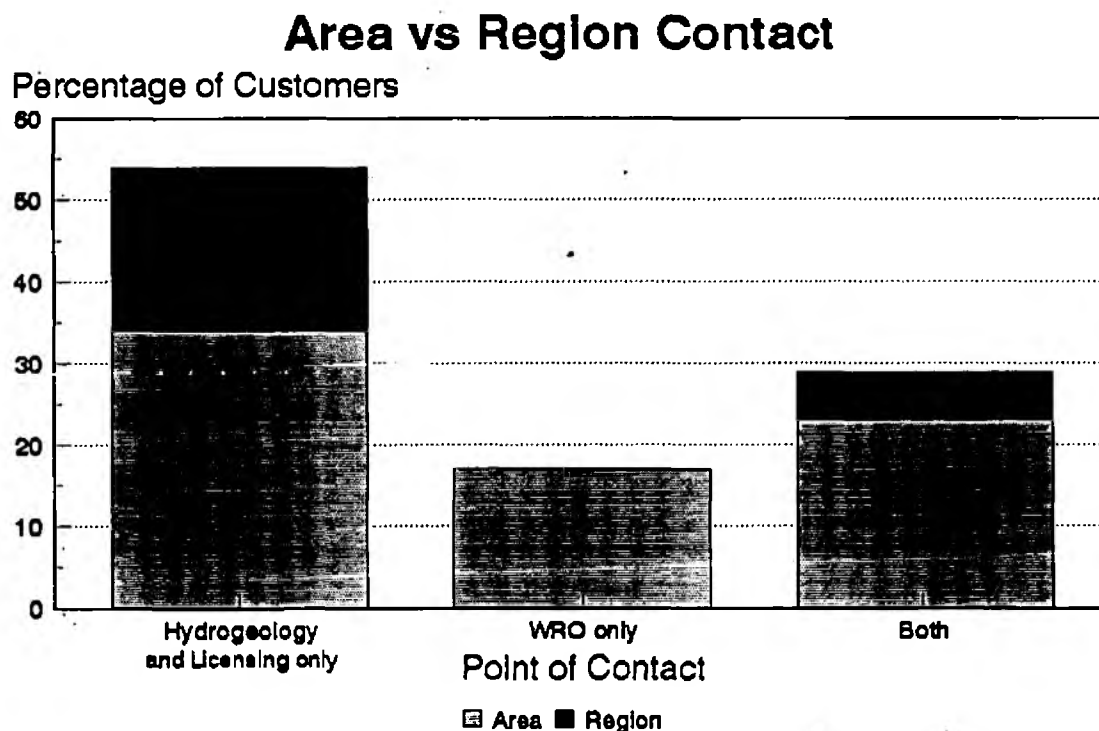


Figure 2.5



### Timing

The majority of customers, 51%, receive a response to any request within 7 days and this rises to 86% within 14 days. For 94% of customers the service provided is within a satisfactory time scale. For the remaining 6%, a faster response, ie. within 7 days, would in certain circumstances be preferable.

### Cost

There is no cost to the internal customer for these services; no internal recharging is carried out.

## **2.4.2 External Customer Profile**

### Identification of customers

The main external customers of Water Resources are other NRA regions, Water Companies, licence applicants, the general public and the Planning Authorities. Customers are located throughout the Thames Catchment area and the services provided are by telephone, written correspondence, site visits by NRA staff and by customer visits to the Reading office.

### Services provided

The services provided to these customers include geological, hydrogeological and licence advice, information and data; the issue of licences to abstract water; advice on the impact of new development on water resources; the provision of a geophysical logging service and the reinstatement of rivers affected by over abstraction.

The extent of the service provided by Hydrogeology and Abstraction Licensing to external customers can be assessed by quoting some key facts and statistics, see Table 2.6 below.

Table 2.6 Statistics illustrating the extent of services provided to external customers

Abstraction/impoundment licences in force (1993/94)*	3175
No. of new licence applications determined (1993/94)*	121
No. of licences varied (1993/94)*	140
No. of licences revoked (1993/94)*	80
Consultations from external bodies/year (Hydrogeology only)#	630
Visitors to the Hydrogeology database/year#	74
Planning liaison consultations/year#	783
Geophysical logging/CCTV trips/year#	98

\* Source - Corporate Plan submission 1994/95

# Source - Hydrogeology monthly reports

### Timing

Services are provided to external customers to agreed timescales as described in the Standards of Service section below.

### Cost

Some customers pay the NRA directly for specific services. This category includes licensed abstractors and consultants. Other customers receive services paid for indirectly through Government grants and taxation.

#### **2.4.3 Standards of service**

The NRA's Customer Charter, published in January 1994, sets out the function of the NRA and the standards of service it will provide. It is aimed primarily at the needs of individual and business customers. The Charter includes standards of service which are applicable to all members of staff in all departments such as telephone calls will be answered within 15 seconds and a written enquiry will receive a response within 10 days. In terms of Water Resources, the Charter specifically states :

- a decision on an application for a licence to abstract or impound water will be made within three months.
- The NRA provides advice to Local Authorities' planning offices with regard to planning applications. 50% of all applications are given advice within 14

days; 75% within 21 days; and 95% within 28 days.

In terms of the number of abstraction licences determined, Thames Region achieved 83%<sup>2</sup> within the statutory period in 1993/94. With respect to planning applications, Water Resources responds to 87% within 14 days and 96% within 21 days, a record which is one of the best of all internal consultees. These statistics have been provided by Planning Liaison for 1993/94 using the Current Application Monitoring System (CAMS). It should be noted that reservations were made by Planning Liaison staff as to the reliability of the figures produced automatically by CAMS. As a result, manual statistics are produced monthly by West Area and these show an even better performance by Water Resources.

Operational standards cover all technical, scientific and engineering procedures and standards which are necessary to put UK legislation and NRA policy into practice. These standards take a number of forms, including policy statements, procedural manuals and quantitative measures of output and performance. The Hydrogeology Group works to the Policy and Practice for the Protection of Groundwater and follows the Groundwater Investigation Consents Handbook. As part of this manual standards of service are set down nationally for the work carried out under Section 32 of the Water Resources Act 1991. These standards are measured using given response times and the minimum level of service is to achieve the target response times for 80% of all applications. The targets have only recently been introduced but over the last four months target response times have been met for 100% of applications.

---

<sup>2</sup>Quarterly Achievement Report 1993/94

The Licensing Group has to produce performance figures on, for example, number of licences varied or revoked. These figures are reported to Head Office on a quarterly basis and are compared to planned output to measure performance. The Quarterly Achievement Report 1993/94, Quarter Four is included in Appendix 2 to illustrate current performance.

In addition to the specified and measurable standards of service described above, the quality of service provided in terms of information and advice given is also very important. The Water Resources Section currently has enough experienced staff to provide a consistently high quality of service even when some staff are on leave or on site.

### **3 The Option For Change**

#### **3.1 Alternative area based structure**

To begin to assess a possible alternative structure, the key tasks within Hydrogeology, Abstraction Licensing and ALF defined in Section 2.1 had to be classified as those which could be carried out in the areas and those which should remain regional. The basic premise stated in Section 1.2 to place in the areas as much work as can be devolved sensibly was accepted and also the proposal that area offices are to be a service delivery entity drawing on specialist support from regional offices. Certain other criteria were also considered :

1. The Hydrogeology database is a unique collection of geological and hydrogeological information on the Thames catchment. It is a single database maintained by one person and at one location to ensure that it is always up to date and that all updating is done in a consistent way. To maintain the integrity of such an important and valuable database, it must remain a single unit, maintained by one person regionally.
2. The Groundwater Protection Zone project is an ongoing national project to provide groundwater protection zones for all potable sources in England and Wales. This involves extensive specialist computer modelling work and substantial administrative work, and is programmed to be substantially complete by 1998 with maintenance work carried out after this date. Within Thames Region there is a commitment to model these zones 'in house' and, to complete the project as agreed, requires the work to be continued regionally where the required expertise and resources will be

available.

3. The Geophysical Logging Unit within Thames Region consists of one specialist member of staff who operates the system in the field, processes the logs in the office and maintains all the equipment. Assistance is provided when required by another member of the Hydrogeology team. The Geophysical Logging Unit of Thames Region has been designated a National Centre of Expertise. It provides a service covering the whole of Thames Region and, due to capital costs, staff costs and work load, must remain regionally based.

4. Under the Water Resources Act 1991, a regional abstraction licensing register must be provided and made available for public inspection. Maintenance of the register is a regional task.

In addition, the new work resulting from the arrangement of having separate area operational and central functional teams must be considered. This includes monitoring performance, regular liaison to give technical and specialist advice and additional administration, (duplication of records and files etc.).

Based on the above, the various group's tasks given in Tables 2.1 - 2.3 were reassessed and those tasks appropriate to be done in the areas and those that must remain regional identified. From this analysis, the number of posts at the centre and in area teams required to carry out all these tasks, to fulfil commitments and maintain current standards were identified. These posts are listed below.

Area Team (x3)

Senior Water Resources Officer  
Hydrogeologist  
Water Resources Officer  
Water Resources Assistant  
Licence Inspector

Central Team

Principal Hydrogeologist  
Abstraction Control Manager  
Senior Water Resources Officer  
Groundwater Modeller  
GPZ Modeller/Administrator  
Geophysical Logging Technician  
Water Resources Assistant

The central team of seven would retain the specialist posts of Groundwater Modeller and Geophysical Logging Technician basically unchanged. The roles of the Principal Hydrogeologist and Abstraction Control Manager would incorporate the central tasks of the ALF Schemes Manager. Some of their current responsibilities and the operational aspects of the ALF work would be devolved to the area teams. The Senior Licensing Assistant would be responsible for licence administration and provide the main contact with the areas on Licensing issues. The Water Resources Assistant would maintain the Licence and Hydrogeology database as well as providing general support for the Senior Licensing Assistant. Also, a new post of GPZ Administrator/Modeller would need to be created to work full time on the Groundwater Protection Zone project to continue the 'in house' modelling as agreed. The post holder would undertake the large amount of administrative work associated with the project and ensure that national timetables are adhered to.

The area teams would be made up of five members of staff and managed by the Senior Water Resources Officer (WRO). The Senior WRO would be responsible for



ensuring the efficient discharge of all the water resources duties under the Water Resources Act 1991 in the area plus liaison with other area functions and the central Water Resources function. The Water Resources Officer and Assistant would be involved in the operational aspects of licensing in the areas :- technical determination of licences and licence administration, input to Catchment Management Plans, dealing with routine licence matters, database and filing system maintenance, licence advice, issue and receipt of abstraction returns. The Hydrogeologist would be responsible for providing hydrogeological support for the abstraction licensing process including all aspects of the Section 32 drilling and test pumping procedures, input to Planning Liaison, investigation of ALF cases and providing information and advice on all area Hydrogeology and Hydrology issues.

### 3.2 Accommodation

The central team would remain at the Thames regional headquarters in Reading and as the numbers would reduce from fifteen to seven there would be no problem with accommodation. However, an assessment of suitable office locations for the area Water Resources teams and availability of accommodation within those offices has been carried out. When assessing suitable locations, the current location of area WROs, location of internal customers and accessibility were all taken into account.

#### West Area

Within West Area there are offices in Wallingford and Osney. Space could probably be made at Osney for five additional people but all West Area internal customers and the WRO are based in Wallingford which makes it a more suitable site. At Wallingford the existing office space rented by the NRA is fully occupied but the

acquisition of additional space should not be a problem.

#### North East Area

Within North East Area there are offices in Waltham Cross, Rickmansworth and Broadmeads. Space could be made available at Broadmeads, but neither the WRO nor any internal customers are based there. Establishment at either Rickmansworth or Waltham Cross would be more appropriate. Accommodation is currently available at Waltham Cross and most of the North East Area internal customers are based there. The office space currently available to the NRA at Rickmansworth, where the WRO is located, is fully occupied but obtaining the use of additional space would not be a problem. Of the two sites there does not appear to be any overriding reason to choose one over the other and so both have been included in the cost analysis in Section 4.

#### South East Area

The South East Area is the most difficult to assess because of the current situation with four area offices: London, Crossness, Guildford and Sunbury and many South East Area staff who are located in Reading. South East Area internal customers of Water Resources are located in all these offices. There is no possibility of accommodating five additional people at Guildford. There is possibly space at Crossness, but the location of these offices, see Figure 2.2, is not central to the area and access to and from Crossness is difficult. Space is available in the London office but again access into and out of London is difficult. This is an important point where field staff regularly travel throughout the whole area. Also, car parking space at the London office is already extremely limited.



If the South East Area team were to be located out of Reading, of the existing area offices, Sunbury would appear to be the most suitable location and space could be made available at this site. The problems of moving to such a congested area of outer London and the possible reluctance of staff to relocate must be considered and weighed against the potential gains of moving out of Reading.

### **3.3 Resources**

#### **3.3.1 People**

The alternative structure described in Section 3.1 involves three area teams of five and a central team of seven, a total of twenty two staff compared to the nineteen currently employed within Water Resources. Taking into account the likely responsibilities of the new posts and comparing with current responsibilities, it is likely that two of the additional posts would be appointed at Grade 10 and one at Grade 5.

Assessing the skills base of the current staff within Water Resources, an indication can be gained of the skills profiles required of new staff and the training of existing staff needed to complete the new structure. Five of the seven central team posts could be filled by existing central staff as their responsibilities would not be greatly changed. Within the areas, the Licensing Inspector posts would be unchanged and could be filled by existing staff. Of the four Water Resources Assistant posts, three could be filled with current staff, leaving one to be recruited. From within the remaining seven staff there are people who either already have the skills or with appropriate training

could acquire the skills to carry out any of the remaining roles. The exact posts within the ten listed above which can be filled internally and hence the posts which need to be filled externally cannot be determined at this stage but substantial experience in hydrogeology, computer modelling, water resources management and water resources legislation will be required.

In this context it is necessary to stress the importance of groundwater resources in Thames Region. The science of Hydrogeology is fundamental to the management of water resources in the region and three professional hydrogeologists are currently employed within the Water Resources function. Because of the importance of groundwater and the high pressure on water resources in the region, it is vital that the required standard of hydrogeological expertise is provided in the areas. It cannot be assumed that area staff trained in other subjects can simply take on the understanding of geological and hydrogeological principles. Hydrogeologists of MSc standard will be required in each area to cope with the complexity of the geology of Thames Region.

### **3.3.2 Information**

The majority of the information currently held in the Hydrogeology and Abstraction Licensing database needs to be locally available to the area teams for them to be able to function properly. Copies of the licences and licence maps would need to be provided at the South East Area office (West and North East Areas already have this information available) and licence correspondence files would need to be maintained locally. Published maps such as the 1:50 000 and 1:10 000 geological maps and key technical books



can be bought as required for the area offices. Once Technical Department and all the area offices are connected to the wide area network, the BWS database, Cardbox and Hydrograph would be available to the areas but maintained regionally. Access to the Groundwater Archive and flow data via the ICL mainframe will continue to be available at Wallingford and Rickmansworth and should be made available at other area offices as required. Much of the information within Hydrogeology and Licensing, however, is in map form and until these are available on a Geographical Information System, copies of all relevant maps would have to be made for the areas and local updating would have to take place in addition to maintenance of the master maps in Reading.

### 3.3.3 Capital equipment

The central team will remain responsible for the groundwater modelling within the region including the Groundwater Protection Zone project. Appropriate hardware must therefore be retained at the centre for this work to be continued. Geophysical log processing will also be done centrally as well as the maintenance of the BWS System on dBASE IV and the library index on Cardbox. Access will also be needed to NALD when this comes into operation and all the core packages on the LAN. Whilst the Water and Abstraction Billing System on the Prime is still used, updating will have to be done regionally. Once NALD is in operation, updating in the areas will be possible. Two 486s will be needed for the groundwater modelling work and two other PCs will be needed for general use - database maintenance, wordprocessing etc. by the other five members of staff.

As discussed above, access to information via the wide area network will be essential for area offices. All core packages will also need to be available in areas plus access to NALD. Extensive use of computers is likely in the areas either for accessing information, updating the licence database (NALD), word processing, small scale groundwater modelling and use of groundwater packages, and a whole range of other activities. For a team of five people with the needs described above, three PCs will be required, all connected to the local and wide area networks.

The total computer hardware requirement for the alternative structure, to ensure full operation of area teams and the maintenance of the current standard of work, is thirteen PCs, all able to be connected to the local and wide area networks with associated printing and plotting capabilities. Water Resources currently have: four 486s, two 386s, one 286. (all 386s and 286s have been identified in the business case to be upgraded to 486s), two printers and a plotter. The plotter in Hydrogeology is currently used for producing processed geophysical log output, Freelance applications and Hydrograph. The areas already have two 486s. To resource the alternative structure in terms of computer hardware would entail the purchase of four PCs. The availability of printers and plotters in area offices would need to be investigated when office locations were agreed to identify any additional requirement for this type of hardware.



## 4 Comparison of Options

The two options presented in this report are: Option 1 - Water Resources remains a single regional function based in Reading, the current position and Option 2 - operational area Water Resources teams are created together with a central team based in Reading. In the following section, the two options are compared in terms of financial implications, impact on people, management issues and impact on customer service.

### 4.1 Financial Implications

The main costs involved are those of staff, accommodation and capital equipment. These are discussed separately below.

#### 4.1.1 Staff

Section 3.3.1 concluded that for Option 2, an additional three members of staff would be needed to complete the structure : two Grade 10s and one Grade 5. The minimum salaries within these grades, as of 29th June 1994, NRA information Bulletin 19/94, are given in Table 4.1 below.

Table 4.1 Salaries for new staff

Post	No. of staff	Minimum salary, £	Total cost, £
Grade 10	2	24,855	49,710
Grade 5	1	14,709	14,709

The additional cost to the NRA of Option 2 in terms of salaries alone would be approximately £64,000. Other expenses incurred in the recruitment of new staff include training and provision of all the required office equipment.

An increase in the head count goes against the NRA's 1993 directive to reduce the overall employee control total in Thames Region from 1478 to 1400 from 31st March 1994. The Thames Region Corporate Plan submission 1994/95 states that " Management of employee numbers continues to be a very high priority". The recruitment of three more staff will be difficult to justify in light of the above and is likely to be strongly resisted by Senior Management. However, to continue to carry out all existing tasks, take on the extra tasks related to an area structure and to maintain current standards of customer service, the three additional staff members are needed.

The need for area Water Resources teams to be properly resourced in terms of staff is clearly an important issue to internal customers. To attempt to restructure with existing staff numbers would result in the following:

- i) a large amount of work would not get done,
- ii) experienced staff would be spread too thinly with expertise in one aspect of Water Resources available in one area but not another, leading to the inability of areas to deal with all water resources matters,
- iii) either the central team would become too small to function effectively or, insufficient staff would move to the areas to be able to devolve all appropriate operational activities to the areas - the basic premise of restructuring.

#### 4.1.2 Accommodation

Under Option 1, as described in Section 2.4.1, there are fifteen people located in Reading, two in Wallingford and two in Rickmansworth. Option 2 will lead to the relocation of some existing staff to area offices and the provision of additional accommodation for new staff both in Reading and the areas. The area offices being considered (see section 3.2) are Wallingford for West Area, Waltham Cross and Rickmansworth for North East Area and Sunbury for South East Area. A breakdown of the accommodation required for both options is given in Appendix 3 together with costs and references.

Using the information provided in Appendix 3, the total additional costs incurred or savings made per year by the creation of area Water Resources teams in terms of accommodation are given below. Costs have been prepared for both Waltham Cross and Rickmansworth as area offices for the North East area.

##### 1. North East Area office in Rickmansworth

Accommodation Released	£pa	£pa
Reading	<u>19880.00</u>	19880.00
<b>Additional Accommodation</b>		
Wallingford	5550.00	
Rickmansworth	4980.20	
Sunbury	<u>6672.90</u>	
		17203.10
Saving		2676.90

## 2. North East Area office in Waltham Cross

Accommodation Released	£pa	£pa
Reading	19880.00	
Rickmansworth	<u>2961.20</u>	
		22841.00
<b>Additional Accommodation</b>		
Wallingford	5550.00	
Waltham Cross	12525.70	
Sunbury	<u>6672.90</u>	
		<u>24148.60</u>
Additional cost		1307.40

The calculations show that, in terms of cost per square foot only, a migration to the areas could lead to a saving of £2,676pa if Rickmansworth became the North East area office. If Waltham Cross was agreed on, this would become an additional cost of £1,307pa. If full relocation to the areas did not occur and the South East area team remained based in Reading, the additional costs of Option 2 would be £7,406pa and £11,990pa (Rickmansworth and Waltham Cross respectively).

There are, however, a number of other issues which must be taken into account when considering the cost of Option 2:

- i. Whichever office is chosen for the South East area, Sunbury or Reading, the rental for Reading Bridge House (RBH) space, currently £19,880.00 pa, must still be paid for until it can be disposed of.
- ii. London weighting is payable to staff located at some area offices : inner London weighting of £2,385 is payable to staff at Sunbury and the intermediate London Weighting of £1,074 at Waltham Cross and

Rickmansworth. With five new people located at Sunbury and three in the North East area, this would increase the total salary bill by a further £15,147<sup>3</sup>.

- iii. There is a cost in relocating people in terms of travel to and from the new location and possibly transfer of house.
- iv. Additional internal travelling may result and mileage claims increase.
- v. The actual cost of the relocation in terms of desks, other office equipment and the cost in terms of staff time during any move.
- vi. The indirect costs of relocation such as Office Services' time, IT Group's time.
- vii. Additional essential car users may be identified entailing additional allowances and the provision of car parking spaces.

The option to create full Water Resources teams in the areas appears, in terms of rental only, to be a matter of £1,000-2,000pa additional cost or saving compared to the option of remaining central in Reading, if the South East area team is based in Sunbury. If the South East team remains based in Reading, however, the additional cost of Option 2 increases to between £7,400 and £12,000. Taking into account all the other costs listed above, particularly the ongoing rental of RBH, relocating will in the short term be significantly more expensive even if the Sunbury office option is taken. In the longer term, the additional costs of London Weighting make Option 2 considerably more expensive.

---

<sup>3</sup>\* Figures for London Weighting taken from NRA Information Bulletin 19/94, 29 June 1994.

### 4.1.3 Capital Equipment

Section 3.2.3 illustrated that Option 2 would require the acquisition of four PCs and potentially some printing and plotting facilities. The standard PC purchased through IT Group is a CI/Leo 486 and all four new PCs would need to be connected to the appropriate local area network. If a requirement for printers was identified, the current replacement for the HP Laser Jet II would be a Kyocera FS 1500. HP7550 plotters are very expensive and the IT Group would recommend the purchase of an HP Desk Jet 560C which prints in colour and, although only taking A4 paper, could be used with Freelance and Hydrograph. Table 4.2 gives the approximate costs of purchasing this equipment and connecting the four computers to a LAN. All specifications and prices were provided by IT Group with costs as of 27/09/94. Time spent by IT Group in installing the extra equipment must also be included in the total cost of Option 2.

Table 4.2 Hardware Costs

Item needed	Cost £
486 computer (CI/Leo 486)	1050
QEMM	70
3COM Ethernet Board	105
KYOCERA FS 1500*	1318
HP 7550A Plotter*	3129
HP Desk Jet 560C*	450

\* Requirement to be assessed

## **4.2 People issues**

### **4.2.1 Changing Roles and Responsibilities**

The current Hydrogeology and Abstraction Licensing sections of Water Resources are well established teams of people who work well together and have created good working relationships within Water Resources and with other functions within the NRA. Restructuring as required by Option 2 will involve the breaking up of the current teams and the formation of new ones. The change of jobs for many of the current Water Resources staff which will follow on from any change in structure may be seen as a positive change or a negative change. The new posts, being more multifunctional, may create challenges and new areas of interest and responsibility for some, including an increase in the scope for career progression. There will also be opportunities for the development of a wider skills base and cross functional involvement. In particular, the creation of three area teams will involve the development of substantial managerial roles for the Senior WROs. For other people, the range of work offered by the new posts may not be commensurate with their current job and scope for progression may be more limited. There is the possibility of the loss of some staff if they feel adversely affected in this way.

Changing to an area structure would involve some people taking on area rather than central roles. The NRA's definition of central and area roles is given in full in Appendix 4 but, briefly, the central role is given as one of leading and facilitating and the area role involves primarily executing and includes preparing, leading as in the promotion of multifunctional working practices and being the primary interface with the customer, facilitating (to assist centre) and following as in following regional policies, standards etc. The change from one role to another will involve substantial adjustment both

in the work carried out and in the relationships with remaining central staff and other functions. Central roles involving leading may have a perceived higher status than area roles which involve following.

These adjustments and the learning of appropriate new skills are bound to take time along with the building of team identities and new team relationships.

#### **4.2.2 Training**

The significant changes in roles and responsibilities which would take place for a number of people under Option 2 will lead to a requirement for training both in management skills and in technical subjects. The training of newly recruited staff will also need to be addressed. The requirement for external technical training will be quite substantial as the opportunity for 'on the job' coaching in specialist subjects will not be available.

#### **4.2.3 Specialist Expertise**

There are a number of staff within Water Resources with specialist qualifications and expertise, particularly in Hydrogeology. In recent years the NRA Thames Region has been able to offer career opportunities to such people. There is a serious risk that subsuming such specialist resources into more multifunctional roles, as would happen under Option 2, would lead to their eventual loss from the NRA to the detriment of the Water Resources Group. Option 2 could also lead to the loss of specialist people if they perceive that it would not enable them to retain their specialist role.



#### **4.2.4 Relocation**

All the Water Resources staff currently working in Reading live in or within easy travelling distance of Reading. Option 1 would not entail any relocation of staff. Option 2, however, would require relocation of a number of staff to area offices. It is not known how many staff would be willing to relocate.

#### **4.2.5 Recruitment**

There have been problems in the past with recruitment to senior posts within Water Resources. There is a shortage of people with the requisite qualifications, particularly when combined with experience in excess of a couple of years. To recruit people with the required technical knowledge, managerial skills and experience in water resources to enable the Water Resources function to be fully operational in both areas and the centre may become a problem.

### **4.3 Management Issues**

The major management issue in respect of the future structure of Water Resources is whether having an area focus for Water Resources would be for political reasons only or whether an area focus and more multifunctional teams will actually lead to an improvement in efficiency.

The way that the Water Resources function is currently structured is highly efficient. Thirteen centrally based staff manage the water resources work covering the whole region. The administration is kept to a minimum and therefore staff time is spent most effectively on achieving the Water Resources Group objectives and maintaining high standards of customer service. A high

level of expertise exists within the Section and enquiries and problems on any aspect of water resources anywhere in the catchment can be dealt with from the Reading office. There are sufficient staff experienced in water resources for a high level of service always to be available despite illness, annual leave or site work. Water Resources staff are always available to attend multifunctional meetings on, for example, planning issues or licence applications and good relationships exist with people in the areas from other functions.

The creation of three area offices and a central team would require an additional three members of staff as discussed in Section 3.1. This apparent decrease in efficiency must be balanced against the gains that may result from arearisation. These are principally the closer integration and identification between all the staff dealing with environmental management in a defined area. This will be essential to get the best out of catchment management planning. However, to maximise the benefits of area management in this way, the location of all staff within one area in a single office is very important. Particularly in South East Area, where staff are currently split between five offices, the benefits of greater integration of staff and any efficiency savings gained in integrated area catchment planning must be minimised. The relocation of Water Resources into South East Area is unlikely to lead to any improvement in this respect but a move to the area offices in North East and, in particular, West Area where all area staff are based in Wallingford, could bring the benefits of closer integration. Also, staff would be involved only in work within their area and so would acquire a more in depth knowledge about that area. Queries on a number of different aspects of water resources would be dealt with by one person from within a multifunctional team without the need for consultation with other sections.

Any potential efficiency gains achieved by Option 2 as described above will be small compared to the large decrease in efficiency resulting in the employment of three new members of staff. The costs must be compared to the benefits mentioned above and the question that Senior Management must answer is where does the compromise lie, in efficiency or area focus ?

#### **4.4 Impact on customer service**

##### **4.4.1 Internal Customers**

The questionnaire survey provided substantial information on customers' perception of the likely changes to the service they receive from Hydrogeology and Licensing if full migration to the areas took place. Views were sought on the likely impact of the location of Water Resources staff in area offices, improved local knowledge and awareness of local issues, the possible problems of access to data by Water Resources staff and the potential dilution of water resources expertise in area teams. The responses varied depending on whether a customer was area or region based.

Of the customers surveyed, 69 % felt that there would be an improvement in the service with the increased personal contact possible if Water Resources staff were located in the areas. 88% of area staff agreed that relocation would lead to a positive change. Not surprisingly, the majority of regional staff, 67%, felt this would lead to a reduction in the service provided to them.

Increased awareness of local issues by area based local teams was considered to be important by the majority, 69%, of respondents. The remaining 31 % did not consider that the service provided to them would change either for the

better or worse. The majority of both area customers and central customers replied positively to this question.

The increased local knowledge gained by area based staff was not considered likely to make a marked difference to the level of service provided. 57% thought it would lead to an improvement, 43% no change. 67% of central customers thought local knowledge would be an improvement compared to 54% of area customers.

An overwhelming majority of customers, 92% in the areas and 78% in the centre, agreed that increased interfunctional contact within the areas would be an improvement. Only 11% of customers felt there would be no change.

Access by area Water resources staff to a more limited database than is currently available would not affect the service provided according to 60% of customers and the majority of both area and central customers. More limited access to other resources such as groundwater modelling expertise was also not thought by the majority of either area or central customers likely to lead to any change in the quality of service provided.

A high level of expertise in the Hydrogeology of the Thames catchment and in Water Resources legislation is currently available centrally. Dividing the existing staff between one central and three area teams would clearly mean that the same level of expertise is not available in each area. 43% of customers thought this would lead to a decrease in the level of service provided, 54% no change and this was clearly of more concern to central customers than those in the areas: 67% of central customers versus 35% of area customers considering this likely to lead to a change.

The possibility of having to contact two area offices for information instead of one central office when a site crossed the area boundary was considered to be a potential problem by 56% of central staff but only 35% of area staff.

The area of most concern to all internal customers in terms of a potential decrease in the quality of service is that there are sufficient resources provided to properly staff area Water Resources teams to provide the essential cover when staff are on site or on leave. 63% (89% central and 54% area) of all customers felt that a decrease in the number of experienced Water Resources staff available at any one time could lead to a reduction in the quality of service they receive.

In summary, there is a clear split between the perceptions of area and centrally based customers on the impact on customer service of a move by Water Resources to the areas. The location of Water Resources staff in the areas is clearly considered to be important both in terms of improved interfunctional contact, increased personal contact between staff and better awareness of local issues. Having a sufficient number of experienced Water Resources staff in the areas is a concern, indicating that a full migration of Water Resources is the only option in terms of improving customer service. In other areas, such as access to data and other resources, levels of expertise in the areas and cross boundary enquiries, the majority of customers feel that having area based Water Resources teams rather than a single central team will not lead to any major change in the quality of service they receive.

Responses to the final question which asked which option would provide the best all round service are illustrated in Figure 4.1. Of all customers 54% thought that this would be provided if Water Resources remained a single

regional unit based in Reading (Option 1), and 43% (one no response) if Water Resources were split to follow other functions and become fully area based (Option 2). Of all area based staff 42% consider Option 1 provides the best all round service and 54% consider that an area structure would provide a better service. Of central staff, the split is 89% for option 1 and 11% for option 2.

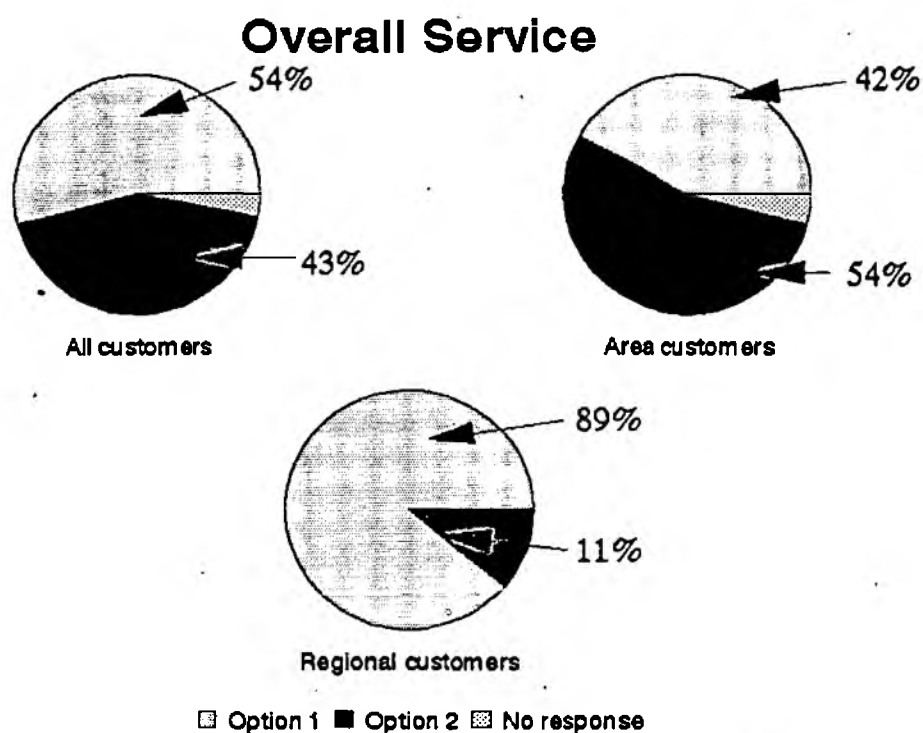


Figure 4.1

The results of the survey have shown that there is no majority view that being area based will improve the quality of the overall service provided by Water Resources. A number of reservations were expressed about the adequacy of resourcing of area based teams and the conclusion to be drawn from the survey is that, in terms of internal customer service, the best option for Water Resources is to remain regionally based.

#### 4.4.1 External Customers

The creation of area teams is unlikely to lead to any substantial improvement in the quality of services in terms of meeting statutory or national NRA standards as the standards already achieved are very high, see Section 2.4.3. However, with Option 2, customers would be able to contact an area Water Resources office and be advised on hydrogeology, hydrology and licensing matters without having to contact a number of different people in different sections ie. a one stop shop. Also, the better local knowledge acquired by staff working within a smaller area may lead to some improvement in customer relations.

The adequate resourcing of area teams is again an important issue if standards of customer service are to be maintained or improved. Sufficient experienced Water Resources staff must be available in area teams to provide a service at all times and all necessary data must be accessible from area offices. Good communications must be maintained between areas and centre for provision of specialist advice and the accessing of information not available in area offices.

Surveying of external customers has not been possible during this project but, as there have been no complaints from external customers about the level of service provided by a regional structure and there is unlikely to be any substantial improvement in the quality of services in terms of meeting statutory and national standards, no firm conclusions can be drawn that there would be any substantial improvement in the service provided by creating an area based structure.



## 5 Conclusions

The creation of three area Water Resources teams and a central team would require the employment of three additional members of staff at a cost of around £64,000 per annum in salaries alone. Relocation, accommodation and equipment costs need to be added to this figure. In terms of cost effectiveness, any improvements brought about by having an area structure such as increased productivity and better communication links between functions would need to have a value equivalent to or greater than the £64,000 pa to make Option 2 the preferred option. The results of this investigation and subsequent analysis presented in the preceding sections show that such improvements over and above current performance are likely to be relatively small.

In terms of customer service, improvement is likely to result from Option 2 by way of local delivery of service to external customers. No clear improvement to the service provided to internal customers has been identified and the majority of internal customers themselves believe the current regional structure provides the best overall service.

In conclusion, it would be better in terms of both customer service and cost effectiveness for the Water Resources section to remain a regional function. Although this conclusion goes against the NRA's corporate philosophy of multifunctional area management, the Executive Group did recognise (Section 1.2) that in the case of certain functions it would be essential to examine economies of scale. This study has shown that in the case of Water Resources in Thames Region the department is too small to be split four ways without the employment of additional staff leading to an overall reduction in efficiency.

## **6. Recommendations**

The main recommendation resulting from this study is that, in Thames Region, Water Resources should remain a regional function based in Reading at least until the creation of the new Environmental Agency. Any change to the definition of Water Resources given in this study or any change in the NRA's policy towards the recruitment of new staff may warrant a review of the document and changes may be required once the final structure of the Environmental Agency is agreed.

Given that Water Resources is to remain regional, the research has suggested that the following recommendations would lead to an improvement in the quality of service offered :

1. Water Resources needs to meet with other key functions to examine ways in which interfunctional management could be improved.
2. Clear guidelines are required on the respective responsibilities of the central Water Resources function and the existing WROs to remove the confusion both within and external to the NRA that currently exists and to eliminate certain inefficiencies that have resulted in this confusion.
3. The setting up of liaison meetings between WROs, Licensing and Hydrogeology staff at an operational rather than managerial level should be investigated to improve communication between the Water Resources function centrally and in the areas and to ensure any future problems are discussed at an early stage.
4. Investigations should be carried out to assess the impact of the current situation on the work of the Hydrology Section ie. the long term impact of the loss of three specialist members of staff on the work carried out, the morale of remaining staff and the development of junior staff.

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

**APPENDIX ONE**  
**Customer Questionnaire**

**HYDROGEOLOGY AND ABSTRACTION LICENSING SERVICE PROVISION  
INTERNAL CUSTOMER QUESTIONNAIRE**

NAME:

JOB TITLE:

LOCATION:

*Questions marked \* - please tick as many options as are appropriate*

1. What Services provided by Hydrogeology and Abstraction Licensing do you currently use?\*

<input type="checkbox"/>	(a) Provision of geological/hydrogeological/licence data
<input type="checkbox"/>	(b) Provision of geological/hydrogeological/licence advice
<input type="checkbox"/>	(c) Response to Planning Applications or preplanning development proposals or structure/local plans.
<input type="checkbox"/>	(d) Other, please specify:

2. On average how often do you have contact with Hydrogeology and Abstraction Licensing concerning the services listed in Question 1.

<input type="checkbox"/>	(a) More than once a week
<input type="checkbox"/>	(b) Less than once a week and more than once a month
<input type="checkbox"/>	(c) Less than once a month

3. How do you generally contact the Hydrogeology and Abstraction Licensing Section?\*

<input type="checkbox"/>	(a) Telephone
<input type="checkbox"/>	(b) Internal post
<input type="checkbox"/>	(c) External post
<input type="checkbox"/>	(d) Face to face
<input type="checkbox"/>	(e) Fax

4. Would you use E-Mail when this becomes regionally available?

<input type="checkbox"/>	(a) Yes
<input type="checkbox"/>	(b) No

5. How long does it normally take for you to receive a response?

<input type="checkbox"/>	(a) Same day
<input type="checkbox"/>	(b) Within 7 days
<input type="checkbox"/>	(c) Within 14 days
<input type="checkbox"/>	(d) Within a month
<input type="checkbox"/>	(e) Longer than a month

6. Is this satisfactory?

<input type="checkbox"/>	(a) Yes
<input type="checkbox"/>	(b) No

*If No, please specify an acceptable timescale:*

7. The area Water Resources Officers have been in post for 12 months now. Do you

<input type="checkbox"/>	(a) Now contact the area WRO's on water resources issues when previously you would have contacted Hydrogeology and Abstraction Licensing?
<input type="checkbox"/>	(b) Contact the area WRO's on some Water Resources issues and Hydrogeology and Abstraction Licensing on others?
<input type="checkbox"/>	(c) Contact Hydrogeology and Abstraction Licensing on all Water Resources issues?

*If you ticked (a) please go onto question 8.*

*If you ticked (b) please go onto question 9.*

*If you ticked (c) please go onto question 10.*

8. If you answered yes to (a) above, is this because the WRO's are based in your area office and this is more convenient?

<input type="checkbox"/>	(a) Yes
--------------------------	---------

<input type="checkbox"/>	(b) No
<input type="checkbox"/>	(c) Other reason, please specify:

*Please continue with question 10*

9. If you answered yes to (b) above, please identify on which issues you contact the area WRO's and on which you would contact Hydrogeology and Abstraction Licensing.

Contact Area WRO's	Contact Hydrogeology and Abstraction Licensing	Reason

*Please continue with question 10*

10. There is a large database held within the Hydrogeology and Abstraction Licensing section in Reading. Please complete the following matrix by circling the Y or N to indicate if you are aware of the type of data available and whether you would use the database more if it was readily available in the areas.

Type of data available	Aware that data available	Would use more if available in area offices
Geology maps at 1:50000 and 1:63360 covering the whole Thames catchment	Y/N	Y/N
A large selection of 1:10000 geology maps	Y/N	Y/N
Published hydrogeological maps on 1:100000 scale	Y/N	Y/N
Internally produced groundwater contour maps of the major aquifers	Y/N	Y/N
Stratum contour maps of some of the major aquifers	Y/N	Y/N
Boreholes wells and springs database (location maps and record cards)	Y/N	Y/N
Groundwater archive	Y/N	Y/N
1:25000 Ordnance Survey maps	Y/N	Y/N
Geophysical logs database	Y/N	Y/N
Geological and hydrogeological library (books and reprints)	Y/N	Y/N
Abstraction Licence returns	Y/N	Y/N
All published geological sheet memoirs	Y/N	Y/N
SSSI location maps and details	Y/N	Y/N

11. Copies of licences and licence maps for the NE and Western areas are now kept in the area offices at Wallingford and Rickmansworth. Will this benefit you in that you will be able to use the database personally because of its new location.

<input type="checkbox"/>	(a) Yes
<input type="checkbox"/>	(b) No

12. Hydrogeology and Abstraction Licensing is centrally based in Reading. Do you

	(a) Think the service provided from Reading is satisfactory in terms of response times
	(b) Find that this causes delay in obtaining data etc because it has to be sent to you from Reading
	(c) See this central location as a distinct advantage because personal access to the data by yourself/your staff and direct contact with Hydrogeology and Abstraction Licensing staff is easy
	(d) See this central location as a disadvantage because personal access to the data by yourself/your staff and direct contact with Hydrogeology and Abstraction Licensing staff is difficult
	(e) Consider that the service currently provided from Reading ie. by telephone, letter, fax etc. is satisfactory and personal access to the data by yourself/your staff and direct contact with Hydrogeology and Abstraction Licensing staff is not essential

13. Please indicate whether you think that if Hydrogeology and Abstraction Licensing become area based with a hydrogeologist and a licensing officer in each area this would lead to an improvement ( ), a reduction (X) or no change (leave blank) in the service we provide in terms of\*

	(a) increased personal contact with Hydrogeology and Abstraction Licensing staff
	(b) access by Hydrogeology and Abstraction Licensing area staff to a more limited database than is currently available centrally
	(c) increased awareness by Hydrogeology and Abstraction Licensing area staff of local area issues
	(d) more limited access by Hydrogeology and Abstraction Licensing area staff to other resources than is currently available centrally eg. computer modelling
	(e) increased local knowledge by Hydrogeology and Abstraction Licensing area staff eg. geography, local people etc.
	(f) the reduction in the number of staff experienced in Water Resources available at any one time to deal with enquiries and to provide cover during annual leave and site work
	(g) increased interfunctional contact in the areas will increase Hydrogeology and Abstraction Licensing staff's understanding of other function's tasks and priorities



	(h) the high level of expertise in the Hydrogeology of the Thames catchment and in Water Resources legislation currently available centrally will not be available in each area
	(i) when data /information is needed for a site on the boundary between two areas this would entail contacting two area offices instead of one central office

14. In summary, do you feel that Hydrogeology and Abstraction Licensing would provide you with a better all round service if we

	(a) remained a single regional unit based in Reading
	(b) were split to follow other functions and become fully area based

THANK YOU VERY MUCH FOR TAKING THE TROUBLE TO FILL IN THIS QUESTIONNAIRE.

PLEASE RETURN TO SUE HUNTER, HYDROGEOLOGY SECTION, RBH6

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

## **APPENDIX TWO**

**Quarterly Achievement Report 1993/94**

QUARTERLY ACHIEVEMENT REPORT 1993/94 – QUARTER FOUR

PERFORMANCE MEASURES

WATER RESOURCES

ACTIVITY/ITEM	HO REF	QUARTER 1			QUARTER 2			QUARTER 3			QUARTER 4		
		ACTUAL	PLAN	VARIANCE	ACTUAL	PLAN	VARIANCE	ACTUAL	PLAN	VARIANCE	ACTUAL	PLAN	VARIANCE
1. HYDROMETRY													
Rainfall: % long term average during quarter REGION	WR/H/1	126	100	26	107	100	7	124	100	24	128	100	28
2. LICENSING													
2.1 No. of Licences varied :	WR/L/1												
– Abstraction Licences REGION		51	35	16	89	70	19	105	105	0	133	140	(7)
– Impoundment Licences REGION		0	0	0	0	0	0	0	0	0	0	0	0
2.2 No. of Licences revoked :	WR/L/1												
– Abstraction Licences REGION		41	20	21	59	40	19	71	60	11	88	80	8
– Impoundment Licences REGION		0	0	0	0	0	0	0	0	0	0	0	0
2.3 % licence applications determined in statutory period	WR/L/3												
– Abstraction Licences REGION		76	73	3	77	75	2	76	74	2	83	75	8
– Impoundment Licences REGION		100	100	0	100	100	0	100	100	0	50	100	(50)
2.4 Average cost of determining a licence (cumulative)	WR/L/4												
– Direct Cost Basis (£) REGION		3238	n/a	–	6417	n/a	–	9620	n/a	–	12916	n/a	–
– Total Cost Basis (£) REGION		4810	n/a	–	9733	n/a	–	14733	n/a	–	19782	n/a	–
2.5 Backlog of Licence applications (No. awaiting determination) :	WR/L/6												
– Abstraction Licences REGION		28	30	(2)	33	30	3	32	30	2	23	30	(7)
– Impoundment Licences REGION		0	0	0	1	0	1	1	0	1	0	0	0
2.6 No. of new licence applications received :	WR/L/7												
– Abstraction Licences REGION		15	30	(15)	37	60	(23)	58	90	(32)	70	120	(50)
– Impoundment Licences REGION		0	0	0	1	0	1	1	1	0	0	1	(1)
3. ENFORCEMENT REGION													
– % achievement of licence enforcement programme	WR/E/1												
– Highly Critical & Critical		71	87	(16)	79	87	(8)	78	87	(9)	85	87	(2)
– Less Critical & Non Critical		76	29	47	70	29	41	52	29	23	55	29	26
4. Demonstrate at least 5 cases where remedial action has emanated from policing of abstractors taking legal action where necessary													
NORTH EAST		1	1	0	2	2	0	4	4	0	5	5	0
SOUTH EAST		1	1	0	2	2	0	4	4	0	5	5	0
WEST		1	1	0	2	2	0	4	4	0	5	5	0
TOTAL		3	3	0	6	6	0	12	12	0	15	15	0

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

### **APPENDIX THREE**

#### **Accommodation Requirements and Costs**

## ACCOMMODATION

### 1. Principles applied

The accommodation requirements have been prepared on the basis of the national space allowances.

	NATIONAL SPACE ALLOCATION (re Lambert, Smith and Hampton Report)
Regional General Manager	250 sq. ft
Regional Manager	250 sq. ft
Senior Managers	200 sq. ft
Permanent staff	110 sq. ft
Grades 10-12	150 sq.ft
Design staff	150 sq.ft

### 2. Current space allocation

#### 2.1 Reading

Description	No. of staff x Square Footage	Total Square Footage
Hydrogeology	1 x 150	150
	5 x 110	550
Licensing	1 x 150	150
	5 x 110	550

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

Description	No. of staff x Square Footage	Total Square Footage
ALF	1 x 150	150
SE Area Staff	2 x 110	<u>220</u>
		1770

2.2 Rickmansworth

Description	No. of staff x Square footage	Total Square Footage
Water Resources staff	2 x 110	220

2.3 Wallingford

Description	No. of staff x Square Footage	Total Square Footage
Water Resources staff	2 x 110	220

3 Additional Area Accommodation

Area Office	No. of staff x Square Footage	Total Square Footage
Wallingford	1 x 150	150
	2 x 110	<u>220</u>
		370
Rickmansworth	1 x 150	150
	2 x 110	<u>220</u>
		370
Waltham Cross	1 x 150	150
	4 x 110	<u>440</u>

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

Area Office	No. of staff x Square Footage	Total Square Footage
		590
Sunbury	1 x 150	150
	4 x 110	<u>440</u>
		590

4 Accommodation Released

Staff vacating Reading	No. of staff x Square Footage	Total Square Footage
6	1 x 150	150
	5 x 110	<u>550</u>
		700

5 Accommodation Costs

i) Reading - total square footage of RBH6 is 11702 minus corridor space of 1445 sq. ft at a total cost of £291300 giving a cost per usable square foot of £28.40. (Ref. Ian Smith, Finance, SLA file).

ii) Wallingford - the space occupied by NRA staff excluding corridor space is rented at a cost of £15.00 per sq. ft. (Ref. Ian Smith).

iii) Sunbury - total accommodation cost is £53790 and the total area is 4757 sq. ft giving a cost per sq. ft of £11.31. (Ref. i. Building Cost Breakdown for In house workforce (KS), ii. Lambert Smith Hampton Accommodation Report).

An appraisal of options for the structure of the Water Resources function in Thames Region NRA

iv) Waltham Cross and Rickmansworth -

	Budget 94/95	Total space sq.ft	Working space sq.ft	Cost per working space sq.ft per annum	Cost per sq. ft per annum
Waltham Cross	£169700 + £68400 notional rent	12482	11215	£15.13	
				£6.10	£21.23
Rickmansworth	£75000		5573		£13.46

ACCOMMODATION RELEASED			
Location	Area	Cost £/sq. ft	Total Cost £
Reading	700	28.40	19880.00
Rickmansworth	220	13.46	2961.20
ADDITIONAL ACCOMMODATION			
Location	Area	Cost £ /sq. ft	Total Cost £
Wallingford	370	15.00	5550.00
Rickmansworth	370	13.46	4980.20
Waltham Cross	590	21.23	12525.70
Sunbury	590	11.31	6672.90



An appraisal of options for the structure of the Water Resources function in Thames Region NRA

**APPENDIX FOUR**  
**Definition of Central and Area Roles**

## DEFINITION OF CENTRAL ROLE

### 1. Central role encompasses:

- Leading, and
- Facilitating.

### 2. Leading involves:

Acting as **function head** by

- operating as conduit to/from **Head Office**
- being **driving force/visionary input** re new ideas to/from Areas and Head Office
- **assisting** Areas in the resolution of inconsistencies, issues etc.
- **assisting** Regional Management Team in the allocation of functional resources (financial and physical) and Areas in the management of the actual outcome for the function, both revenue and especially capital but also manpower
- **interpreting** standards (HO, legal) ) = providing **framework** for operations )
- **creating** regional standards ) = identification and promulgation of )
- **disseminating** (all) standards ) necessary minimum level of consistency )
- **determining** regional priorities, ) of approach )  
**targets and objectives** )
- **monitoring** and assessing functional policy achievement

### 4. Facilitating involves service provision, including being:

- **custodian** and **communicator** of good practice
- **centre of expertise** (a shared resource for areas, eg. support for Catchment Management Plans)
- **supporter** of Area activities eg. Corporate Plan preparation
- **co-ordinator** of activities straddling Areas
- **liaison** with outside parties (committees etc.)

All are **co-operative** activities involving **sharing**.  
(Source - Project Team on 11.1.93)

## DEFINITION OF AREA ROLE

### Elements of Area Role

1.     **Executing**     -     day to day operational tasks (the key element)  
but also including
2.     **Preparing**   -     Catchment Management Plans as the focal point of all  
Area/Catchment based activity
3.     **Leading**       -     primary interface with customer for all NRA functions  
                              -     promotion of multifunctional working practices as the norm  
                              -     focus on multifunctional aspects, (viz a viz Centre weighted to  
functional aspects)
4.     **Facilitating**   -     prioritisation of Area proposals  
          (to assist       -     proactive contribution to policy formation  
          centre)         -     'in the field' feedback to Centre (and thence Head Office)
5.     **Following**    -     Regional framework re: policies, standards, practices etc.

In carrying out their role, Areas will expect support and services from the Centre eg. Business Services support, 'Critical Mass' Central expertise.

(Source - not referenced)