

NRA NAVIGATION STRATEGY





NRA

National Rivers Authority

For further information please contact:

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

Tel: 0454-624400

Fax: 0454-624409

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This document is one of a series, the others in the series are:

NRA Water Quality Strategy
NRA Water Resources Strategy
NRA Flood Defence Strategy
NRA Fisheries Strategy
NRA Conservation Strategy
NRA Recreation Strategy
NRA R&D Strategy

Other publications are available from the NRA. These include the following:

NRA Annual Report and Accounts
Policy and Practice for the Protection of Groundwater
Water Quality Series
Low Flows and Water Resources
Annual R&D Review
Conservation & Fisheries Technical Handbooks

Publication catalogues are available from all the NRA Offices.

The addresses and telephone numbers for all NRA offices are listed on the inside back cover of this document.

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MISSION AND AIMS

The NRA's mission is:

- "We will protect and improve the water environment by the effective management of water resources and by substantial reductions in pollution. We will aim to provide effective defence for people and property against flooding from rivers and the sea. In discharging our duties we will operate openly and balance the interests of all who benefit from and use rivers, groundwaters, estuaries, and coastal waters. We will be businesslike, efficient and caring towards our employees".
- Provide adequate arrangements for flood forecasting and warning.
- Maintain, improve and develop fisheries.
- Develop the amenity and recreational potential of inland and coastal waters and associated lands.
- Conserve and enhance wildlife, landscape, and archaeological features associated with inland and coastal waters of England and Wales.

Our aims are to:

- Achieve a continuing overall improvement in the quality of rivers, estuaries, and coastal waters, through the control of pollution.
- Manage water resources to achieve the right balance between the needs of the environment and those of the abstractors.
- Provide effective defence for people and property against flooding from rivers and the sea.
- *Improve and maintain inland waters and their facilities for use by the public where the NRA is the navigation authority.*
- Ensure that dischargers pay the costs of the consequences of their discharges, and, as far as possible, to recover the costs of water environment improvements from those who benefit.
- Improve public understanding of the water environment and the NRA's work.
- Improve efficiency in the exercise of the NRA's functions and to provide challenge and opportunity for employees and show concern for their welfare.



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FOREWORD

This document sets out the National Rivers Authority's strategy for navigation. It forms part of a series of published documents, covering all the NRA's main functions.

The documents are intended to make the NRA's approach to the integrated management of the water environment plain to all interested parties, whether their interest is private or professional. This is in recognition of the stake that individuals have in the environment, both as taxpayers and water users.

The strategies have been developed as internal drafts over a period of time with much constructive input from a wide range of interest groups, including those represented on our Regional Committees. This consultation demonstrates our commitment to working in response to and influencing public opinion.

The strategies have already served to direct the NRA's policy development over the last two years. Their publication at this point reinforces the essential inter-relationships between the NRA's individual functions, as

preparations for the Environment Agency continue. When considered together, they present a strong case for the continuing integration of all NRA functions. This argument becomes still more convincing when applied to the management of water, land and air proposed for the new Agency.

The overriding aim directing the NRA's work is the protection and improvement of the water environment. We are determined to make a real and positive difference to the rivers, estuaries and underground and coastal waters of England and Wales. This resolve will be strengthened by the inclusion of the NRA's integrated approach into what promises to be among the most effective forces for environmental good in Europe.



Ed Gallagher
Chief Executive

AN INTEGRATED APPROACH TO THE ENVIRONMENT

Vision and Reality

When we think of the water environment, most of us would conjure up a vision of an unspoilt river in its natural state, meandering across open countryside, its banks rich with flora and fauna, its waters teeming with aquatic life.

In fact, very little of our water environment remains unaffected by human activity. Alterations to rivers probably started with forest clearances about 3000 BC. The subsequent development of water-milling, navigation and drainage and irrigation systems caused major and lasting changes to habitat, vegetation and the shape of rivers.

During the 18th Century, canals were constructed and rivers were made navigable to create a transport network that made the industrial revolution possible. Yet when the railways were built, the commercial waterways traffic dwindled and many waterways fell into disuse and decay.

Sustainability - a Balancing Act

However, this trend has been reversed in postwar years due to increasing demand for waterborne recreation and an awareness of the historic, social and ecological value of the inland navigation system. The challenge for the NRA as "Guardian of the Water Environment" is to continue to make progress into the next century, protecting and improving our rivers, estuaries and coastal waters in a sustainable and cost-effective way. These improvements will bring benefits to the entire inland navigation system.

We make increasing - and sometimes conflicting - demands of our natural environment. These demands, working in concert with natural phenomena, can result in serious environmental problems. Water quantity, already reduced by abstraction, is further reduced by drought. Water quality, affected by low river flows, is at greater risk from pollution by the public, industry and agriculture. Polluted water puts aquatic life and abstraction for public supply at risk.

Similarly complex interactions exist between river flow and flooding, channel morphology and navigation, and water quality and watersports. These demands and their interactions make the protection and improvement of the water environment, the NRA's core business, an increasingly delicate balancing act. The use of economic cost-benefit analysis, amongst others, offers a rational approach to the balancing process.

The Answer - an Integrated Approach

The NRA believes that the best way of arriving at sustainable solutions is to take an integrated approach to river management. This treats a river, together with the land, tributaries and underground water connected with it, as a discrete unit or catchment.

This approach is not new - the NRA and its predecessors have laid the foundations for it over a period of time - but the means of achieving it *is* new.

The NRA's approach is called *catchment management planning*. Under this system, the major uses within a catchment - such as abstraction and discharge needs, recreation and navigation use, areas of special conservation interest or in need of flood protection - are investigated and a *catchment management plan* is devised in consultation with interested bodies and the public. These plans present catchment issues, address conflicting uses and identify actions needed by the NRA and others to ensure that use-related environmental objectives are met.

In this way, management decisions take individual catchment needs into account. The impact of navigation upon the management of a river catchment requires, amongst other things, the maintenance of water levels and supply. Where the NRA is the Navigation Authority, the function is intimately associated with other NRA functions, and is managed within an holistic framework. This allows us to operate as a flexible national organisation, making real improvements at local level that meet the community's needs. This is a clear demonstration of our commitment to the principles of the Citizen's Charter.

Targeting the Resource

Increased awareness of these local needs puts the emphasis on the real world outcome of our work - the NRA has to be seen to be using money from taxpayers and industry in a cost-effective way, to make a tangible difference to the quality of our water environment. The NRA's system of integrated catchment management will achieve this by targeting resources to areas where they are most needed.

The NRA's drive for efficiency and increased value for money will bring added benefits. Our review of activities to see whether there is further scope for market testing - the process of exposing in-house functions to competition from the private sector - forms an integral part of this efficiency drive.

Towards an Integrated Agency

This move towards closer integration of all our functions will be a cornerstone in our preparations for the Environment Agency. The new Agency's responsibilities will embrace air, land and water and will incorporate functions currently performed by NRA, Her Majesty's Inspectorate of Pollution and Local Waste Regulatory Authorities.

The Agency promises to be one of the most effective powers for environmental improvement in Europe and as strong a regulator as any in the world. These preparations will ensure a firm foundation for safeguarding the environment of England and Wales for future generations.

IMPROVEMENTS TO THE WATER
ENVIRONMENT WILL BRING ADDED
BENEFITS TO THE ENTIRE INLAND
NAVIGATION SYSTEM.

THE ENVIRONMENT - A FINITE RESOURCE UNDER PRESSURE

Use of our Environment

The uses we make of our environment include:

- water abstraction for public and private water supply, industry, agriculture and navigation;
- effluent discharge from sewage treatment works, industrial processes and farms;
- development needs for housing, industrial parks and new infrastructure;
- waste disposal ranging from land-fill of domestic waste to the disposal of sewage/agricultural sludge;
- emissions to air from industrial processes and vehicle exhausts;
- mineral extraction from coal and other mineral and quarry workings;
- recreation in the form of walking, bathing, fishing, boating and a whole range of other outdoor activities;
- commercial harvesting of fish and shellfish.

These uses are legitimate and necessary for the continuance of our way of life. Sometimes they are of positive benefit as in the case of a

properly treated discharge helping to supplement low river flows. However, the evidence of the pressures caused by our needs is clear:

- excessive abstraction - especially its impact on water levels and availability of water for locks;
- pollution - can affect the amenity value and may pose a health risk to boaters;
- land use change - can restrict access to the water, affect landscape and amenity value, and restrict the use of the riverside for navigation purposes.

Table 1 illustrates the use of our environment in general terms and highlights some uses of particular relevance to navigation.

The need to balance uses against environmental pressures will require the quantification and evaluation of a range of policies, projects and courses of action. Economic analysis will help reveal the most efficient use of the increasingly scarce resources within an overall strategy for sustainable use.

Table 1 - Use of our Environment

GENERAL	
● Total Abstraction Licences in Force	48,000
● Total Water Abstracted*	59,200 Megalitres/day*
● Water put into Public Supply	18,000 Megalitres/day
● Approximate Number of Angling Licences Sold	1,000,000/year
● Estimated Number of Recreational Walkers	20,000,000/year
● Number of Farming Units	186,000
● Total Discharge Consents in Force	110,000
KEY NAVIGATION STATISTICS	
● Estimated number of boats on inland waterways	>100,000/year
● Licensed boats on NRA Navigations	42,000/year
● Total length of navigable inland waterways	> 4000km
● Length of waterway where NRA is navigation authority	806 km

Notes:

* This figure, when compared with recent publications is higher, due to re-definition of the calculation

* Megalitre = 1 million litres

Present Status of Navigation in the Water Environment

Reason for Optimism

Despite the pressures on the environment, there is reason for optimism. Improvements in the water environment as a whole during the last thirty years have increased the demand and potential for recreational and commercial navigation on the inland waterway network.

Boating generally (including sailing) is more geographically spread than many other water sports, although most NRA navigations are in the east and south east of England. The National Survey of Boating Activity (NSBA) estimates 46% of boating takes place on inland waterways.

One third of domestic holidays in the UK include boating or sailing as the main element of the holiday. This accounts for in excess of a million holidays annually.

The inland waterway network is still used by commercial traffic and over twelve million tonnes of cargo are transported in this manner throughout England and Wales every year.

No Room for Complacency

Current trends indicate that the demand for navigation, and so the pressures on water space, will increase in the future.

In the longer term, inland waterways may play a larger and important complimentary role within the country's overall transport infrastructure.

Future growth will depend on the continued availability of facilities not only in terms of access, but also moorings, storage facilities and sanitation points. These are under considerable pressure, particularly in the most popular boating areas.

There is a clear need for increased mooring and shore facilities such as launch sites and storage amenities. Further marina developments on inland navigations are needed to meet demand and to relieve channel congestion. There is a particular shortage of basic low cost amenities available for casual users.

This presents a range of challenges for the future management of navigation. Positive action will be required, from a range of organisations and individuals, to maintain and improve navigations and the associated facilities.

POSITIVE ACTION WILL BE REQUIRED TO
MAINTAIN AND IMPROVE NAVIGATIONS
AND ASSOCIATED FACILITIES.

LEGISLATIVE, FINANCIAL AND INSTITUTIONAL FRAMEWORK

Legislative Framework

The NRA's ability to act to maintain and, where necessary, improve the water environment is dictated by European Community (EC) and UK legislation.

At National Level

The NRA was formed as a result of the Water Act 1989. Those aspects of the Water Act 1989 which concerned the NRA were later consolidated into the Water Resources Act 1991.

The Water Act 1989 gave the NRA various legal responsibilities for inland navigation in England and Wales. General legislation which governs the navigation function includes the Land Drainage Act 1976, the Sea Fish Industry Act 1951, the Pilotage Act 1987, the Harbour Docks and Piers Clauses Act 1847, and numerous regulations made under shipping and waterways legislation. Day to day operation and management, where the NRA is the navigation authority, is governed to a large extent by local and special Acts and Orders, including:-

- The Anglian Water Act 1977;
- The Upper Medway Navigation and Conservancy Acts 1911 and 1914;
- The Southern Water Authority (Transfer of Lower Medway Navigation Function Order) 1979;
- The Southern Water Authority Act 1982;
- The Harbour of Rye Revision Order 1976;
- The Thames Conservancy Acts 1932, 1950, 1959, 1966, 1972.

The 1991 Water Resources Act gives the NRA various byelaw making powers for inland waters in England and Wales where there is a public right of navigation and while no other authority legitimately exercises navigation powers.

The NRA has general environmental duties, in relation to all of its functions, including the

need to further conservation. The NRA also has a duty, generally to promote conservation and the use of inland and coastal waters and associated land for recreational purposes. Details of these can be found in the NRA's Conservation and Recreation Strategies.

At European Level

The NRA also acts on behalf of Government as the competent authority for certain EC Directives in England and Wales. The NRA will seek to influence EC and UK legislation on all relevant inland navigation matters by acting as a focal point for navigation issues. An example of this is the EC Draft Directive for the Construction of Recreational Craft.

Legislation in Practice

The legislation imposes duties on the NRA that it must carry out. Other provisions take the form of powers that the NRA uses to fulfil its duties and meet its aims. This combination of duties and powers determines the broad allocation of effort and resource.

Table 2 provides an outline of the duties and powers which the NRA has in respect of navigation.

Financial Framework

The NRA is funded largely by a combination of Government grant-in-aid (GIA) and self-generated income from NRA charging schemes. Navigation charging policy seeks to recover from users, as far as is practicable, the cost of providing navigation facilities.

Until 31st March 1993, licence fees were collected and returned to the Treasury. From 1st April 1993 this anomaly was removed and licence fees are now retained by the NRA and treated as income.

The income is largely derived from licensing and registering boats, with a smaller proportion from mooring fees, pilotage (Harbour of Rye), commercial cargo dues (Harbour of Rye and Dee Estuary) and property rentals. The scope of these charging schemes and the potential to harmonise them is restricted to some extent by specific navigation Acts.

It is recognised that there is a significant number of other direct and indirect beneficiaries of the navigation service from which it is not practicable to recover any costs. Examples include riparian owners and visitors to the riverside: estimates indicate that annually 7 million people visit the Thames Locks. GIA is acknowledged as contributing towards this broader benefit.

Institutional Framework

The NRA and Government

The NRA is a non-departmental public body, sponsored by the Department of the Environment (DoE). It also has important policy links with the Ministry of Agriculture, Fisheries and Food (MAFF) and the Welsh Office (WO).

The Other Players

In addition to the NRA, there are many other bodies and organisations which have a role to play in improving and promoting the water environment for all to enjoy. The NRA can

influence their activities by its actions and vice versa. Effective liaison with the following organisations is key to the success of the NRA's strategy.

- **Commission for the European Communities (CEC):** sees environmental legislation as being of primary importance. Much recent UK environmental law has been determined by EC Directives, and increasingly these and other directives will impact upon navigation. The NRA is taking a more active role in influencing the thoughts that lie behind EC legislation in its early stages.
- **Department of the Environment and Welsh Office:** as sponsors, the Secretary of State for the Environment and the Secretary of State for Wales have ultimate responsibility for national navigation policy.
- **Ministry of Agriculture, Fisheries and Food (MAFF):** also a sponsoring Department and a statutory consultee.

Table 2 - Duties and Powers

Duties as a Navigation Authority

As a navigation authority the NRA is governed by general legislation, local and special Acts and Orders.

Byelaw Making Powers of the Authority

Section 210 of the Act* enables the NRA to make byelaws for the purposes of regulating or prohibiting boating and recreational activity on a) waters and associated land under its control and b) where a right of navigation exists but is not controlled by another authority.

Power of Authority to levy navigation tolls

The NRA has powers under Section 143 of the Act* to apply to the Secretary of State for an Order imposing navigation tolls on any navigable water subject to:

- the navigable water not being under the control of any navigation authority, harbour authority or conservancy authority.
- an increase in the costs of maintenance or works in connection with the use of these waters for purposes of navigation.

Incidental power of the Authority to impose charges

Section 144 of the Act* enables the NRA to fix and recover charges for services and facilities provided in the course of carrying out its functions.

Orders and Agreements for Transfer of Navigation, Harbour and Conservancy Functions

The NRA may apply for an Order, under schedule 2 of the Act* transferring to the NRA any of the functions or property of a navigation, harbour or conservancy authority. This will be subject to public consultation. The transfer may also be effected by agreement between the bodies, but this will be subject to the consent of the Minister for Agriculture, Fisheries and Food and the Secretary of State for the Environment.

Note:

* Water Resources Act 1991

MAFF also has an important role in relation to other NRA interests linked to navigation - flood defence, fisheries, agricultural pollution and marine sludge disposal and dredging.

- **The NRA's Statutory Regional Committees:** these committees have many representatives from interest groups among their members and act as sounding boards for the NRA's policies with the public. These have a right to be consulted and to offer advice on their own initiative.
- **Local Authorities:** liaison with planning departments. Some Local Authorities are themselves Navigation Authorities.
- **National Governing Bodies of Sport:** liaison takes place at National and Regional levels with: the Royal Yachting Association; the British Canoe Union; the Welsh Canoe Association; the British Waterski Federation; the Amateur Rowing Association and other representative organisations.
- **British Waterways (BW) and the Broads Authority (BA):** collaboration and liaison with BW and BA has been established to share expertise and develop joint initiatives which will lead to an improved and integrated inland waterways network. There are approximately 26 other inland navigation authorities, whose involvement is essential to the development of a national strategy for inland navigation in England and Wales.
- **Inland Waterways Association (IWA):** is interested in encouraging retention and restoration of inland waterways (rivers and canals) for the full range of users groups eg. boaters, walkers and anglers. It is concerned with the environmental aspects of waterways and discussions take place with the NRA on areas of mutual concern. The IWA is also an umbrella organisation with affiliation from restoration groups and groups such as the Derwent Trust. They give both advice and grant aid to these groups.
- **Water Recreation User Groups:** regional liaison between the NRA and regional and local user groups is critical to the delivery of the navigation service and forms an important point of contact with the 'customer'. Their collaboration and support is essential.
- **British Marine Industries Federation (BMIF) and other trade associations:** there is a significant amount of economic activity related to navigation. The BMIF represents trade bodies. The NRA also liaises with other relevant trade bodies.
- **National and District Marine Safety Committees and Working Groups:** the Department of Transport has established these Committees to review responsibility for safety. The NRA will support and assist the review.
- **The Media:** can readily influence public opinion. Their interest in news - good and bad - must be focused to ensure that the NRA's point of view and policies are placed before the general public in an objective and clearly understood manner.
- **Pressure and Trade Groups:** many national groups - Friends of the Earth, Tidy Britain Group, Greenpeace, Inland Waterways Association and the British Marine Industries Federation - as well as local ones, influence public opinion on environmental matters and help produce the climate in which the NRA operates.
- **The Public:** millions of people enjoy using, and have a great interest in, the water environment. Navigation facilities, such as locks, are often enjoyed as much by spectators as the actual users of the navigation fairway.

All of the above interested parties have a stake in the water environment. The NRA's strategy for navigation is set out in the following pages. Its successful implementation will require co-operative action from some, support from others, but - most importantly - the commitment of all if we are to maintain and improve standards.

Scope of NRA Navigation Activity

The Authority currently undertakes operational activity in respect of navigation in five of its Regions, including lengths of the river Thames, the Medway, several East Anglian rivers, the Lower Derwent, Market Weighton Canal, Dee Estuary and Harbour of Rye. Most recently the NRA has accepted delegated navigation duties on a part of the river Tees. These sites are currently managed in various ways, with different byelaws, licences, regulation and maintenance.

The Broad Strategy

The NRA's principal aim in relation to navigation is to:

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

To achieve this aim the NRA seeks to:

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

This requires the NRA to take a lead, in working with other navigation authorities, to bring about a more consistent approach to the administration of navigation in inland waters than currently exists in England and Wales. Also to facilitate and regulate the use of those inland navigations for which the NRA is navigation authority or has powers to manage the inter-relationship of navigation with other core functions of the NRA.

The NRA will seek to influence EC and UK legislation on all inland navigation matters by acting as a focal point for navigation issues.

Regulation of NRA Navigations

The NRA will use existing navigation statutes and byelaws to regulate and manage navigation within its control. However, much of the legislation is now outdated, does not reflect the change from commercial transport to recreational use and restricts movement towards harmonisation between navigation authorities. Therefore the NRA will:

- review existing NRA navigation legislation;
- identify desirable changes that take account of local demands and national harmonisation;
- develop a suite of 'model' byelaws;
- identify opportunities to revise legislation and promote these changes.

The NRA will continue to seek implementation of the nationally agreed standard specification for the Boat Safety Scheme. Local statutes and byelaws will be amended to facilitate implementation of the Scheme.

Navigable Waterways Without Active Authorities

The NRA has permissive powers in respect of navigations without active navigation authorities and will compile an inventory of, and assess the importance of, issues relating to these navigations.

Subject to these reviews and after appropriate consultation, the NRA will:

- encourage, where appropriate, the use of rivers for navigation, taking into consideration the legitimate rights of land and fishery owners and the NRA's conservation duty;
- where there is a need and rationale, promote byelaws which will be consistent with the development of 'model' byelaws.

Access Agreements

Where there is no public right of navigation, the permission of the riparian owner is required before a river can be used for boating or canoeing.

The NRA supports the use of 'access agreements' as an effective means of achieving the shared use of rivers and encourages their use. The NRA will:

- offer the service of its officers to act as mediators in the negotiation of access agreements;
- advise, through liaison meetings, literature and other media, both riparian/fishery owners and navigators of each party's views and requirements;
- through literature and other types of publicity, promote ways in which the river may be used by navigators, anglers and others and may take place without conflict;
- encourage greater liaison between user groups and move towards further access agreements.

Operations

Integrated River Management

The NRA will perform its navigational duties within the framework of integrated river management. The navigation function plays a key role and has close operational links with most other NRA functions:

- flood defence - regarding water level control, structure defect reporting, river use and facilities for transport;
- pollution control - regarding pollution response, pollution reporting, and use of resources in emergency;
- water resources - regarding water level control, collection and provision of data;
- recreation - regarding structure defect reporting, towpath condition reporting,

reporting (and sometimes managing) use of sites, and collaborative projects to enhance access;

- fisheries - regarding fish pass operation reporting, and use of resources in emergency.

The NRA will also work, liaise and collaborate with other inland navigation authorities, where possible, to achieve the aims and objectives of these parties and integrate their work into the overall management of the catchment.

Capital and Revenue Works

In relation to its capital and revenue works, the NRA will:

- undertake programmes of repair, maintenance and improvement of NRA navigations, and, when appropriate, provide new facilities;
- in developing these programmes, take account of local demands, participation trends and, increasingly, Health and Safety legislation which impacts upon the design and maintenance of structures.

Standards of Service

The NRA will develop and publish Standard of Service statements for its navigations, which will constitute the NRA's service offer to its navigation customers, and will measure and publish the service standards achieved on a comparative basis. Standards of Service will:

- be specific to each major navigation or group of navigations but will be drawn from a national framework and list of service headings;
- have headings which will consist of a combination of customer services (eg. hours of lock opening; depth of water maintained) and NRA duties (eg. quantified patrol activity, safety inspection turnaround);
- all be described and measured in a manner readily understood and recognised by customers.

Finance

The NRA will recover from users the costs of providing specific navigation facilities and a reasonable proportion of the costs of maintaining the navigation.

All NRA navigation charges will be set on a consistent basis having regard to appropriate common factors. Scales of charges will be compatible throughout the NRA and, as far as possible, with other inland waterway authorities. Charges will continue to take into account local and commercial factors.

Where an interchange exists between navigations, the NRA will seek to reach agreements with the relevant authorities in order to simplify the administration and licensing requirements for navigation.

The NRA will seek to achieve a better relationship between charges and services given for vessels navigating across authority boundaries.

Improvement of Navigation in England and Wales

In order to consolidate and improve its effectiveness in waterway management, the NRA will seek to play a leading part in national navigation matters.

Most of the canal network and a number of other navigable rivers are regulated by other authorities, with the largest being British Waterways (BW) and the Broads Authority (BA).

The NRA will make the fullest use of its powers and position as a national body and will work to achieve administrative simplification for the users of the national inland waterways network, irrespective of the ownership of individual waterways.

Therefore the NRA will:

- seek to influence EC and UK legislation on all inland navigation matters by acting as a focal point for navigation issues;
- continue to support the liaison and collaboration between NRA, BW and BA;
- consider ways in which the collective interests of all inland navigation authorities can be addressed.

RESOURCES AND TIMETABLE FOR ACHIEVEMENT

A Flexible Resource

The achievement of our strategy is dependent on a flexible, yet specialised resource. The NRA has:

- 640 moorings;
- 115 locks and weirs;
- 25 NRA vessels;
- 14 sanitary stations;
- 8 pumpout facilities.

The NRA will make all staff aware of the Navigation Strategy as an integral part of ensuring that NRA resources are directed towards its achievement.

Efficient Use - Value for Money

The cost of deploying this resource is some £7.0 million per year. Of this some £4 million is on NRA Navigations operation and maintenance; some £2 million on Improvements/ New works and some £1 million on Regulation/ Enforcement and Liaison. NRA income from navigation users accounts for 45% of this. The remaining 55% is paid by GIA (see figure 1).

The Timetable for Achievement

The broad timing of the NRA's major initiatives to maintain and improve navigation are given in the chart below. Their implementation is supported by business plans. These management documents provide details of the components of each initiative, as well as their relative priority, outputs, timing and resourcing. Short to medium-term milestones in the achievement of the overall strategy are set out in the NRA's annual Corporate Plan and reported on in the NRA's Annual Report and Accounts. Achievement of these initiatives is in many cases dependent on action by others to the same timescale, as documented in catchment management plans at local level.

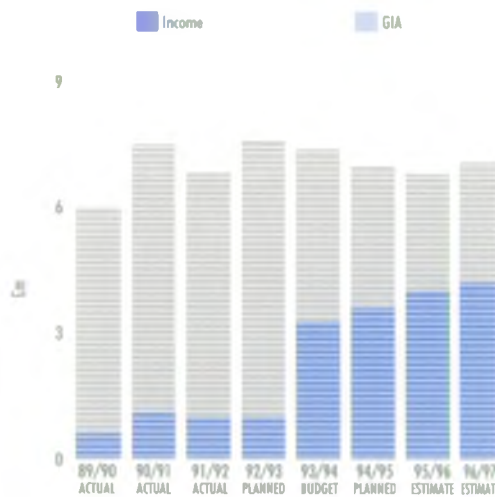
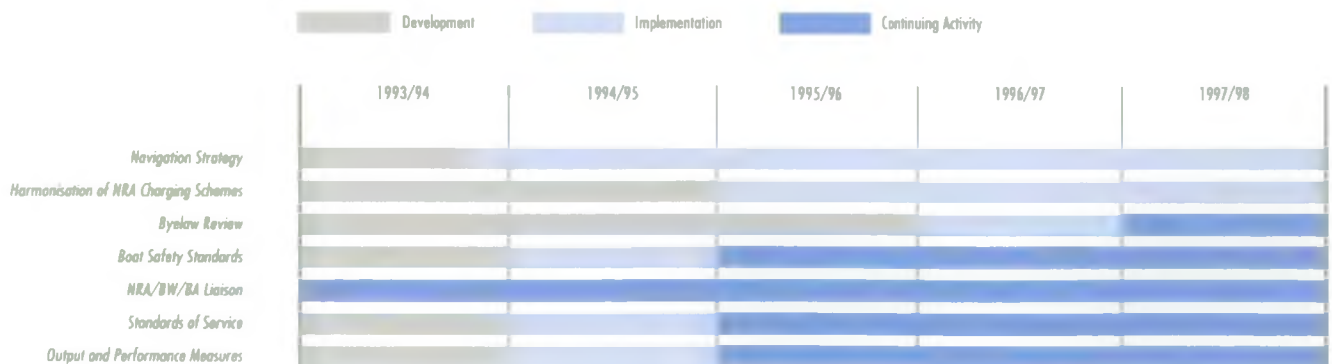


Figure 1 - Funding of Expenditure.



RESEARCH AND DEVELOPMENT

Research and development (R&D) makes an essential contribution to the NRA's work. It provides new knowledge and techniques which allow us to fulfil our duties better.

Strategic R&D in support of the NRA's navigation work addresses a number of key issues.

R&D is divided into two main areas: management and planning, and technology. Management and planning covers the

development and use of monitoring and surveying techniques to assess participation levels and trends. This will aid infrastructure planning; provision of facilities; levels of service; and an assessment of environmental impacts. Technology covers the development of environmentally acceptable boat propulsion systems; bank protection systems; improved engineering methods for navigation installations and design standards for navigation facilities.

The one certain prediction that can be made is that the water environment will be subject to a great many changes in the future. Some are within the NRA's sphere of influence, many others are not.

Impact of the Navigation Strategy

The NRA's Navigation Strategy will form a part of the Authority's integrated approach to the management of the water environment. It will ensure that resources are targeted towards the improvement of maintenance and management of the NRA's navigations. Closer liaison and collaboration with other inland navigation authorities should provide the basis for an improved and more efficient inland navigation network throughout England and Wales.

Uncertain future

Factors which may influence navigation activities include:

- demographic changes;
- standard of living and affluence;
- leisure time;
- lifestyle changes;
- green issues;
- congestion and saturation;
- development issues and planning policies.

Changes in the quantity, quality and diversity of facilities available will raise or lower demand locally. The NRA will keep a close eye on these developments and will adjust policy in response to them.

The Environment Agency

The future of the environment in England and Wales will be influenced by the success of the proposed new Environment Agency. Areas of particular importance include:

- that navigation interests should be reflected in the new Agency's duties;
- the success of integrated river management to gain maximum environmental benefit from investment;
- the relationship between Government and the new Agency. Public confidence in independent enforcement of standards will only be retained by an "arm's length" relationship. The fair attribution of NRA costs to polluters and beneficiaries is also important here - to ensure that public funds are spent where they should be, namely on work for the public benefit, carried out on behalf of the Government, and the nation.

MEASURING OUR SUCCESS

The success of the work of the NRA and, in due course, of the Environment Agency, will be most clearly shown by real improvements in environmental quality. Our progress in maintaining and improving navigation will be monitored using the following key indicators:

Key issues and indicators of performance include:

- licence compliance;
- proportion of lockage days for which locks are operable;
- maintenance of facilities;
- measures of public satisfaction.

Standards of Service will be developed at National and Regional level to provide the navigation customer with a clear indication of the types and levels of service to be expected from the NRA.

These and other measures will be monitored and published regularly, as an important part of our remit to report to Government and the public on the state of the environment.

THE STRATEGY WILL ENSURE
THAT RESOURCES ARE TARGETED
TOWARDS THE IMPROVEMENT
OF NRA NAVIGATIONS.

GLOSSARY OF ACRONYMS USED IN THIS DOCUMENT

BA	Broads Authority	IWA	Inland Waterways Association
BMIF	British Marine Industries Federation	MAFF	Ministry of Agriculture, Fisheries and Food
BW	British Waterways	NRA	National Rivers Authority
CEC	Commission for the European Communities	NSBA	National Survey of Boating Activity
DoE	Department of the Environment	R&D	Research and Development
EC	European Community	WO	Welsh Office
GIA	Grant-In-Aid		

NRA REGIONAL OFFICES

HEAD OFFICE

Rivers House
Waterside Drive
Aztec West
Almondsbury
Bristol
BS12 4UD
Tel: (0454) 624400
Fax: (0454) 624409

LONDON OFFICE

Eastbury House
30-34 Albert Embankment
London SE1 7TL
Tel: (071) 8200101
Fax: (071) 8201603

ANGLIAN

Kingfisher House
Goldhay Way
Orton Goldhay
Peterborough PE2 5ZR
Tel: (0733) 371811
Fax: (0733) 231840

NORTHUMBRIA & YORKSHIRE

21 Park Square South
Leeds LS1 2QG
Tel: (0532) 440191
Fax: (0532) 461889
Gosforth Office
Eldon House
Regent Centre
Gosforth
Newcastle Upon Tyne
NE3 3UD
Tel: (091) 2130266
Fax: (091) 2845069

NORTH WEST

Richard Fairclough House
Knutsford Road
Warrington WA4 1HG
Tel: (0925) 53999
Fax: (0925) 415961

SEVERN TRENT

Sapphire East
550 Streetsbrook Road
Solihull B91 1QT
Tel: (021) 7112324
Fax: (021) 7115824

SOUTHERN

Guildbourne House
Chatsworth Road
Worthing
West Sussex BN11 1LD
Tel: (0903) 820692
Fax: (0903) 821832

SOUTH WESTERN

Manley House
Kestrel Way
Exeter EX2 7LQ
Tel: (0392) 444000
Fax: (0392) 444238
Bridgwater Office
Rivers House
East Quay
Bridgwater
Somerset TA6 4YS
Tel: (0278) 457333
Fax: (0278) 452985

THAMES

Kings Meadow House
Kings Meadow Road
Reading RG1 8DQ
Tel: (0734) 535000
Fax: (0734) 500388

WELSH

Rivers House/Plas-yr-Afon
St Mellons Business Park
St Mellons
Cardiff CF3 0LT
Tel: (0222) 770088
Fax: (0222) 798555





NRA

National Rivers Authority