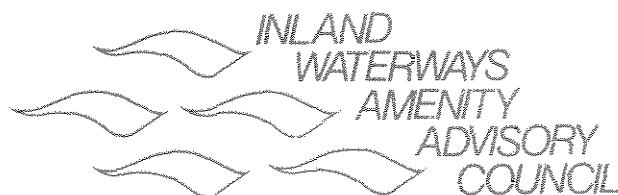


# Inland Waterways

## Arteries for Employment and Spending

A Background Paper on the Tourism and Recreational  
use of the Waterways of the British Waterways Board





DAVID B. WAIN  
Chairman  
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4th August 1980

Your Ref

Our Ref

Dear Parliamentary Under-Secretary of State,

When you came to our May Meeting, you asked the Council to suggest ways to bring more revenue to the waterways, and to bring a greater assurance of prosperity for private firms operating on them. It is therefore essential first of all to place the activities of the Board in their correct national context, and secondly to make sure all the existing relevant facts are known and understood.

It has been accepted since 1947 that the authority responsible for the maintenance and development of the inland waterways under Government control will need financial assistance to carry out its statutory duties adequately. Over the past years many people have expounded upon the natural beauty and potential for use and development that inland waterways offer. However, from my knowledge no one has attempted to assess in detail the financial and employment benefits to the community that inland waterways actually provide today.

The work of the British Waterways Board provides the following main services for the nation, which can be grouped under three broad areas of activity:

1. TRANSPORT ACTIVITIES

- a) Transport of goods and materials
- b) Transport of people for tourism and recreation

2. NON TRANSPORT ACTIVITIES

- c) Angling
- d) Walking
- e) Nature Study
- f) Industrial Archaeology

3. PUBLIC SERVICE ACTIVITIES

- g) Drainage of farmland, towns and urban areas
- h) Supply and movement of water to industry and the home
- i) Maintenance of the fabric of the waterways to ensure public safety.

IWAAC's statutory duty requires the Council to consider matters relevant to amenity and recreation on the Board's waterways. This Paper is concerned with the employment likely to be generated throughout the community from two of these services where payment is made by the user concerned, namely, the transport of people for tourism, recreation and angling. These activities generated a spending of about £55m. in 1979.

Before dealing with the Council's findings on these aspects, it is important to state the relevance of this work to the other services that the nation receives from the Board, as follows:

#### THE CARRIAGE OF FREIGHT

It is only during the last decade that the nation has come to realise that there might be some merit in reassessing the value of some of our major inland navigations for freight transport. By using modern terminals, containers and techniques similar to those already developed in Europe, a number of industrial centres in Britain could find that freight carrying on inland waterways not only bring benefits to the economy, but also represents a major saving in energy and is much less polluting to the environment than other transport systems.

There is also, of course, potential for enhancing the existing employment for providing for freight carriage on inland waterways, in the areas most benefitting from an active freight-carrying waterway.

#### THE DRAINAGE OF FARMLAND, TOWN AND URBAN AREAS

Waterways have always drained the land alongside them. When the canals were first built many drainage channels and small streams were incorporated into these new waterways, and in consequence, towns and urban areas now rely upon the Board's waterways "to keep their feet dry", particularly when coping with storm water.

#### THE SUPPLY AND MOVEMENT OF WATER TO INDUSTRY AND THE HOME

This again is a service that the Board's waterways have performed efficiently and without fuss almost from their very beginnings. Industry uses this water in two ways:

- a) For cooling purposes when water is withdrawn and returned unpolluted, and
- b) when water is supplied for processes which involve pollution, and is disposed of through the normal foul sewer.

#### THE MAINTENANCE OF THE FABRIC OF THE WATERWAY TO ENSURE PUBLIC SAFETY

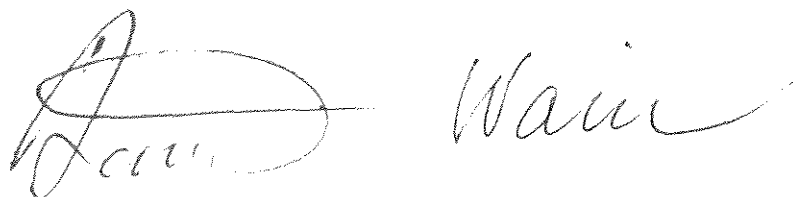
As you know, this is a vital service and the serious arrears of maintenance, together with the high cost of maintenance of many of the original canal structures (aqueducts, embankments etc.) have been confirmed in the independent Consultant Engineers' Report for your Department (The Peter Fraenkel Report, 1977). The safety of adjacent homes and businesses depends on the ability of the Board to tackle these considerable maintenance problems.

By providing these services the BWB waterways play a vital role in industry, agriculture and public safety affecting the employment and well being of millions of people throughout the country.

In this letter I have outlined the wide range of the British Waterways Board's activities which are outside their recreational responsibilities. This highlights the fact that the grant in aid received by them has therefore to be spread over a wide range of duties.

The Paper we now submit estimates in employment terms some of the benefits from those activities which fall within the Council's terms of reference. It is thus a first step in the acceptance of the massive return the nation receives from the inland waterways, and of the considerable potential for improving those benefits for employment, industry, recreation and tourism.

Yours sincerely,

A handwritten signature in cursive script, appearing to read 'David B. Wain', written in dark ink.

David B. Wain  
Chairman

J. Marcus Fox M.B.E., M.P.  
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BRITISH WATERWAYS BOARD'S WATERWAYS -

Arteries for Employment and Spending.

Introduction: The 1968 Transport Act divided the inland waterways of the British Waterways Board into three categories:

- a) The 347 miles of Commercial Waterways which are principally available for the commercial carriage of freight;
- b) The 1,086 miles of Cruising Waterways which are principally available for cruising, fishing and other recreational purposes; and
- c) The Remainder - (482 miles in 1978) - which if retained must be dealt with by the Board in the most economical manner possible consistent with the requirements of public health and the preservation of amenity and safety.

The Council's statutory function under this Act covers recreational and amenity aspects of the Board's waterways. The operations of the Board in accordance with their statutory responsibilities, which enable the major part of this mileage to be available for recreational use, require the Board to employ some 3,000 staff having a wide range of skills. (Appendix "A").

Tourism and recreational activities on inland waterways fall into these main categories:

- Boating
- Angling
- Walking
- Nature Study
- Industrial Archaeology

The Inland Waterways Amenity Advisory Council in accordance with their statutory duty to advise the Secretary of State for the Environment, have recently been requested to suggest ways to bring more revenue to the waterways, and to bring a greater assurance of prosperity for private firms operating on them. This Paper covers the present spending patterns and the consequent employment generated by almost one-million people who pay to enjoy the waterways, for tourism and recreational purposes annually.

THE FINDINGSa) EXPENDITURE

1. The findings on the spending by tourists and recreational users who pay to enjoy the Board's waterways can be summarised as follows:

<u>Usage</u>	<u>Total Spending</u> £
i. Privately owned powered craft	9,900,000
ii. Short day trips	3,202,000
iii. Holiday hire	13,700,000
iv. Angling	15,275,000
v. Privately owned unpowered craft	600,000

In total this represents a 1979 expenditure on recreation and tourism on the BWB waterways of more than £40 million.

2. In addition, the building of craft for BWB waterways in 1979 amounted to £14.6 million, one-fifth of the home boat sales of the British Boating Industry.

b) EMPLOYMENT

3. Since the decline of commercial carrying on the 'narrow canals' the recreational boating industry has become the principal generator of employment on the cruising system. The numbers employed can be summarised as follows:

	Nos. employed ( <u>Appendix "B"</u> )
Craft for holiday/short period hire	820
Trip boats, floating hotels, etc.	280
Boat-building, boat sales and repairs	2,275
	<hr/>
	3,375

4. The spending of those who pay to use the waterways for tourism and recreation (Appendix "C") has been translated into the numbers of jobs throughout the community by applying a recognised 'economic multiplier'. (Appendix "D").

5. This indicates that there are 3,500 jobs (units of employment) which are directly dependent upon the tourism and recreational use of inland waterways, in non-waterway related activities, such as public houses, shops and businesses. There are a further 5,500 jobs (units of employment) generated indirectly in the many industries supplying goods and services to these dependent activities. A further 2,000 people are employed in firms supplying goods and services to the boat-building industry. (Appendix "B3")

6. Recreational use of the Board's waterways therefore generates the following number of jobs:

<u>EMPLOYER</u>		<u>DEPENDENT EMPLOYEES:</u>		
		<u>Wholly</u>	<u>partially</u>	<u>indirectly</u>
i)	Boat building	2,000	-	2,000
ii)	Hire boat industry	1,100	-	
iii)	Private boat maintenance	275	-	
iv)	Pubs and shops etc.		3,500	
v)	Suppliers to ii), iii) and iv) above			<u>5,500</u>
<u>Totals:</u>		<u>3,375</u>	<u>3,500</u>	<u>7,500</u>

In addition, the British Waterways Board employ 3,000 staff, giving a total basic employment figure for the waterways of over 17,000 jobs.

7. It must be emphasised that the expenditure figures relate only to those who pay to use the waterways for tourism and recreation. Countless thousands visit canalside sites and use the national network of towing paths for these purposes and the amount of business they generate in the community is too widespread to be accurately assessed. It could well be double these basic employment figures, particularly if the employment generated by the other activities and services provided on the Board's waterways is taken into account.

c) TYPES OF BUSINESS

In the last two decades a recreational boating industry has developed to meet the demands for inland waterways as a major tourism asset. The services provided include the following:

- i) Holiday hire in self-catering 'self-drive' pleasure craft.
- ii) Holidays in 'hotelboats', with meals and crew provided.
- iii) Day trips or short period trips on craft.
- iv) Construction of inland waterways craft.
- v) Repair, service and provision of accessories and facilities (moorings, sanitary disposal etc.) for inland waterways craft.

9. Of the 250 or so canal and riverside firms known to be providing these activities, most are small businesses offering a combination of services. On average they employ the equivalent of three full-time employees per service. Some operate in conjunction with a land based facility (museum or inn) - (Appendix "A"). None of the skills required can readily be replaced by advances in the field of automation and technology. As the opportunities for exercising non-technological skills diminish elsewhere, waterway-related business will become all the more essential as a medium for increasing employment.

d) AREAS OF EMPLOYMENT

10. Not all the 2,000-mile network provides these employment and business opportunities. There are some 'Remainder' waterways where angling and boating take place only on isolated lengths. Stretches of the 'Commercial' waterways are also less suitable for the full range of recreational activities. However, on well over three-quarters of the network these significant benefits from tourism and recreational use of waterways are provided to businesses within two miles of their banks, and to their suppliers over a much wider area.

11. 1,500 miles of the Board's waterways lie within non-metropolitan counties and the business they provide often forms a significant part of the economic and employment structure of rural communities.

e) RETURN TO THE EXCHEQUER

12. The employment identified also generated a significant return to the Exchequer (Appendix "E"). Based upon the total numbers of jobs in related activities outlined in this Paper, the return in Income Tax is over £13m. (1979).

To this figure must be added the return in other forms of taxation to the Exchequer from the operation of tourism and recreational enterprises (the boating industry and other canalside establishments). The VAT return to the Exchequer from the boating industry on the Board's waterways in 1979 was in the region of £4m. and interest paid by the British Waterways Board on their debt and loans returned just under £1m.



## CONCLUSIONS

This Paper gives a broad outline of the benefit to the nation gained as a direct result of tourism and recreational activities on the Board's waterways.

The Council believe that their findings are so significant that they require a fresh look to be taken at the ways in which the level of financial assistance for the waterways is determined. It is already apparent that the greatest opportunities for increased benefit, in terms of employment and financial returns are presented by the following:

- a) The investment in areas where the expansion of waterway-related development in small businesses could greatly alleviate the shortage of jobs.
- b) The creation of further jobs and spending offered by the development of 'Remainder' waterways for the full range of tourism and recreational activities.
- c) The extension of the existing markets, particularly for increased foreign tourism.
- d) The social benefits offered by employment in all waterway-related businesses, particularly those requiring skilled crafts, as an alternative to automated industry.

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### GENERAL NOTE ON APPENDICES

The statistical information used in this Paper is based on the lowest reliable estimate available. This means that the results of the Council's work will tend to under-estimate the true national spending and employment patterns related to the Board's waterways.

Further information, particularly on the use of trip-boats and unpowered craft, would enable the full extent of the economic and employment benefits to be gauged.

Appendix "A"THE NATURE OF THE EMPLOYMENT INVOLVEDI. Waterways Managementi) Full and part-time

Most of the personnel employed by the British Waterways Board serve the following areas of the Board's activities which require specialist management to respond to particular problems affecting recreational uses as outlined below:

a) Engineering

Canal and river bank maintenance  
 Water supply (including reservoirs and feeders)  
 Drainage  
 Maintenance of historic structures (locks, tunnels, aqueducts, etc.)  
 Physical changes affecting the above (subsidence, building works, etc.)  
 Planning of the above works to minimise disruption to all users.

b) Estates Management

Management of waterside land and property to enable recreational use, (including leasing to voluntary groups, local authorities and private enterprise).  
 Public access to towing paths  
 Wayleaves and Agreements  
 Care of historic buildings (lock houses, warehouses, etc.)

c) Freight Carrying

Use of freight handling areas for recreation (moorings and navigation within docks, ports etc.)  
 Shared use of waterways for recreational and commercial carrying.  
 Effect of increased carrying capacity of a navigation on the environment (e.g. South Yorkshire Canal Scheme).

d) Amenity and Recreational Provision

Provision of facilities for recreation uses:-  
 sanitary stations, moorings etc.  
 Licensing and registration of pleasure craft  
 Fisheries management  
 Conservation of natural habitats  
 Architectural and landscape design considerations  
 Recreational planning (including statistical information)  
 Conflicting needs of recreational users  
 (e.g. anglers and boaters).

These activities are supported by a central core of personnel responsible for:

Legal matters, finance, staffing, general management and administration.

Appendix "A" continuedii) Professions and Trades Employed

Bricklayer	Water Manager	Electrician	Engineer
Joiner	Painter	Transport	(Mechanical
Mechanic	Plumber	Plasterer	& Civil)
Plant Operator	Roofing Expert	Solicitor	Architect
Steel worker	Surveyor	Accountant	Water Engineer
			etc.

iii) Other Employment

- a) There are normally opportunities for part-time and temporary employment at peak times of activity for waterways' maintenance.
- b) In recent years many projects to enhance the waterways' recreational and amenity value have required the employment usually through local authorities, of hundreds of additional personnel.
- c) Inland waterways are recognised as an ideal medium for gaining experience in manual skills (outlined in ii) above). Recent schemes promoted in conjunction with the Manpower Services Commission, have enabled the employment of several hundred people on canalside improvement works.

II. THE INLAND WATERWAYS' BOATING BUSINESSESi) Full and part-time employment

Proprietors of boatyards operating craft for hire often play an active part in the running of the business. A significant proportion are 'husband-and-wife' owned and managed. The administration of such businesses normally requires full time staff to carry out the following functions:

Accounting	Clerical Staff	Stores
	(bookings etc.)	

ii) Trades Employed

Such enterprises also provide employment for the following trades:

Boat builder	Joiner	Painter
Boat repairer	Marine Engineer	Plumber
Electrician	Mechanic	Steel fabrication Worker

iii) Other Employment

- a) During the peak period of operation such enterprises normally require additional temporary staff, to help with the cleaning and servicing of hire craft and trip boats, and to provide administrative support for bookings and financial matters. This has the effect of doubling or even trebling the number of people employed at these times.

- b) Contractors specialising in the services required for the management of waterways, and boating businesses benefit considerably from works necessary to remedy the arrears of maintenance found on the waterways, and when waterside businesses are expanding and new moorings or basins need to be constructed. Much of the more operational skills involved, such as plumbing, electrical work and construction of new buildings is sub-contracted, involving local tradesmen.
- c) The inland waterways boating industry is a good medium for training in the particular skills required for small boat-building and maintenance. Boatyards on inland waterways employ school leavers and apprentices for this purpose. Some leading ship-builders' training establishments are regularly using specially-constructed 'narrowboats' equipped for use by the handicapped, as an important means of apprentice-training. The total number receiving training in this way is a growing figure which at present involves some 260 young people annually.

### III. "VISITOR SERVICE" INDUSTRY

#### i) Full Time

a) This category of enterprise is devoted to encouraging the growing public interest in inland waterways for tourism and recreation. Perhaps the best example is the Inland Waterways Association (a Registered Charity) which was founded in 1946. It has a membership of several thousand with an interest in all aspects of inland waterways freight and leisure uses, and now supports a general and sales office of five full-time staff.

b) All over the country museums and interpretive centres look to inland waterways for their theme, providing employment for curators and janitorial staff. Converted canalside buildings make an ideal base for craft industries meeting this demand for mementos and household articles with an inland waterways' theme.

#### ii) Trades Employed

The above industries using inland waterways as their main source of trade comprise craftsmen in:

Metalwork	Joinery	Pottery
Weaving	Painting	Other art forms

#### iii) Other Employment

Specialist literature on all manner of inland waterways subjects is in itself a growth industry which receives a considerable proportion of its sales through the outlets afforded by the IWA and the Museums etc. outlined above. Monthly publications, waterways maps and educational aids now account for a significant proportion of several publishers' annual output.

Appendix "B"      Employment and Turnover in the Boating Industry

B1.    Number of people employed in the Boat-hire Industry

The number of people employed in the hire industry was estimated using the numbers of full-time and part-time employees given in answer to an APCO \* questionnaire in 1978, to estimate the average number of full-time and part-time employees per base.

From a survey of hire bases it appears that part-time employees work approximately one-quarter of the time of a full-time employee per annum. The numbers of part-time employees has therefore been expressed as the equivalent number of full-time man-years of employment. Allowances have been made for the fact that many bases employ fewer people than the APCO Survey indicates.

The average number of 'man-years' of employment for each activity was then multiplied by the total number of bases engaging in each activity (as set out in the "Waterway Users' Companion" of 1979), to give an approximate number of full-time employees in the boat-hire industry.

<u>Activity</u>	<u>Number of Employees per base</u> (in full-time equivalents to nearest 0.5)	<u>Number of Bases</u>	<u>Total</u> <u>Employment</u>
Powered Boats	4.5	176	800
Other hire boats	0.5	47	20
		<u>Total Employed</u>	820
Passenger Trip Boats	2.5	76	190
Restaurant Boats	3.5	12	42
Hotelboats	2.5	19	48
		<u>Total Employed</u>	280

The total employment generated is therefore approximately 1,100

\* NOTE: The Association of Pleasure Craft Operators are the trades organisation representative of the majority of boat hire firms on the British Waterways Board's waterways. Their Questionnaire was directed to a representative sample of their Members. The relative numbers of bases involved in each activity covered by the survey are very similar to those obtained from the BWB's own "Waterway Users' Companion" which contains a full list of such firms on all their waterways.

APPENDIX B      Employment and Turnover in the Boating Industry

B2. Turnover of Boathire Firms (for application in Appendix C)

The average turnover for each activity was obtained from the results of a questionnaire circulated by APCO\* to a representative sample of their members in 1978 (updated to 1979 prices).

The total turnover accruing to each activity from all bases on the BWB's waterways was determined by multiplying the averages obtained above by the total number of bases involved in each activity (as given in the "Waterway Users' Companion").

<u>Activity</u>	<u>Average turnover</u> <u>per base in £</u>	x	<u>Total number</u> <u>of bases</u>	=	<u>Total turnover</u> <u>in £</u>
Passenger trip boats	14,544		76		1,105,344
Restaurant boats	12,100		12		145,200
Other hire boats	6,424		47		301,928
<u>TOTAL</u> (Appendix C2)					£1,552,472
Powered hire boats	46,229		176		8,136,304
Hotelboats	19,800		19		376,200
<u>TOTAL</u> (Appendix C3)					£ 8,512,504

TOTAL TURNOVER IS THUS APPROXIMATELY £10,441,200

\* The Questionnaire sent out by APCO to a representative sample of their membership is thought to give a representative picture of the national situation. The relative numbers of bases involved in each activity included in the APCO survey are very similar to those obtained from the "Waterway Users' Companion" for the whole country.



## APPENDIX B      Employment and Turnover in the Boating Industry

### B3.    Boatbuilding

Turnover: The SBBNF\* estimate that boat sale on the BWB system comprise one-fifth of all home boat sales. The total for home boat sales in 1979 amounted to £72.8m. (SBBNF's "Statistical Review 1978/9") and those on the BWB system to £14.6m.

Employees: In the SBBNF's "Statistical Review 1978/79" the home sales per employee and the total of home sales of pleasure boats are given. From this it is possible to estimate the total number of employees concerned with home sales and one-fifth of these will be employed in building boats for the BWB system in establishments which are not necessarily alongside waterways. (Appendix A).

<u>Turnover Groups</u>	<u>£0 - 50,000</u>	<u>£50 - 100,000</u>	<u>Over £100,000</u>
Total home sales:	£2,768,000	£3,577,000	£78,807,000
Total home sales per productive employee	£4,492	£5,715	£12,680
Total home sales per admin employee	£14,039	£22,494	£38,755
Number of productive employees	616	625	6,215
Number of other employees	197	159	2,033

Total number of employees is 9,845

One-fifth of total number of employees is 1,969 (approximately 2,000).

There are also companies specialising in components and materials needed for the construction of canal craft which are dependent upon the boating industry. The SBBNF estimate that the numbers employed in these companies are related to the number directly employed by the boating industry on a ratio of one to one. This would indicate a further 2,000 such jobs in the boating industry serving the Board's waterways.

Private Boat Maintenance: As estimated in Appendix D (D2) maintenance of private powered boats generates employment for approximately 275 people in addition.

Total employment in boatbuilding, sales and private boat maintenance is therefore approximately 4,275 people.

\* The Ship and Boat-Builders' National Federation comprise the vast majority of builders, repairers and equipment suppliers for inland and coastal recreational craft in Great Britain.

APPENDIX CUses of the BWB's Waterways and Resultant SpendingC1. Privately owned powered craft

It is estimated that for every private powered craft on the waterways, a minimum of twenty people enjoy a boat trip every year (i.e. relations and friends).<sup>\*</sup> In 1979 there were 17,400 private powered boats licensed and registered with BWB so that at least 348,000 people used a private boat on the waterways in that year.

Amount spent on the maintenance of a boat

It is estimated that private boatowners spend between £298 - (Reading University Survey figure updated to 1979), and £450 (IWAAC survey of Members of Staffs & Worcs Canal Society expenditure in 1979) per annum on licences and mooring fees, club membership, insurance, maintenance, running costs such as fuel and oil. If it is assumed that about £300 is spent per annum per boat, then a total of £300 x 17,400, or £5,220,000 is spent by private boaters on maintenance each year.

Total number of 'user-days'

The average number of days cruised per year by each boat is 30. (BWB "Boats and Their Owners".) The average number of people on each boat trip is 3.4 persons. (Reading University Survey.) The total number of 'user-days' per annum is therefore:

$$30 \times 3.4 \times 16,700 = 1,700,000 \text{ user-days.}$$

Expenditure by private boaters in businesses near the waterways:

The average expenditure per person per day on all private boat trips is estimated to be between £1.70 (IWAAC survey of Staffs & Worcs Canal Society), and £3.41 (Reading University Survey updated to 1979). In this study an average of £2.30 has been used. The total expenditure by private boaters in such waterway related businesses is therefore:

Number of people per trip	x	Number of Days Cruised	x	Average Expenditure per person	x	Number of boats	=	Total
3.4		30		£2.30		17,400	=	£4,082,040

Travel Costs

Both the Reading University Survey and the BWB "Boats and Their Owners" survey found that although about 50 per cent of boatowners travelled less than 10 miles to their craft, some travelled considerably more than this. The Reading Survey estimated that £1.98 (updated to 1979) on average was spent by boatowners on each boat trip on travel to and from their home.

The survey "Boats and Their Owners" showed that the annual 30-days cruising was made up of 9.8 day trips, 4.5 weekends and 2.6 longer trips. This would mean that an owner travels to and from his boat 16.9 times in a year. Assuming that friends travel with the owner the cost of travel is then:

Average cost of travel	x	Number of journeys per year	x	Number of boats	=	Total cost
£1.98	x	16.9	x	17,400	=	£582,238

The total expenditure by private boaters accruing to the waterways in one year (at 1979 prices), including returns to BWB, is then:

Cost of maintenance	+	Expenditure by boaters	+	travel costs	
£5,220,000	+	£4,082,040	+	£582,238	= £9,884,078

This is approximately £9,900,000

\* See "Priorities for Action on the Waterways of the British Waterways Board", a report to the Secretary of State for the Environment, IWAAC 1975.

## APPENDIX C      Uses of the BWB's Waterways and Resultant Spending

### C2    Short Day Trips

Trip boats, restaurant boats and small craft for day hire usually operate for about six months of the year. From the figures of use given in IWAAC's "Priorities for Action" Report it was estimated that at least 750,000 individual trips were made on these boats. This figure is borne out by APCO's Survey and the estimate that all these types of boats together hold 50,000 people.

Total number of 'user-days' is therefore 750,000.

Many people will take a trip on one of these boats more than once a year and others will also use private boats and powered hire boats. Even so, at the very minimum there are at least 250,000 people whose only experience of boating on the waterways is through trip boats, restaurant boats or day boats, according to available information.

#### Expenditure in businesses near the waterways and on travel

Expenditure by day visitors on travel, eating and drinking out, souvenirs etc. has been estimated in some regional studies. These estimates vary from £1.86 (Tayside Study figure updated to 1979) to £2.62 (Anglesey Study figure updated to 1979). This gives an average expenditure of £2.20 spent per person on travel and incidentals.

Expenditure by 750,000 visitors is therefore approximately £1,650,000

#### Expenditure on passenger boats, day boats and restaurant boats

This expenditure has been estimated in Appendix B2 to amount to some £1,552,472, or approximately £1,552,500 in 1979.

The total expenditure is therefore as follows:

Expenditure in businesses near the waterways	+	Expenditure on hiring and trips	=	Total
£1,650,000	+	£1,552,500		£3,202,500

Total expenditure by day trippers who use boats is some £3,202,000

APPENDIX C      Uses of the BWB's Waterways and the Resultant SpendingC3      Holiday Hire

Statistics from the questionnaire circulated by APCO give an estimate of the number of holiday-makers (including foreign visitors) per boat per week for boats in 1978. From this an average number of holidaymaker-weeks per boat can be determined and then multiplied by the total number of boats licensed and registered to give the total number of holidaymaker-weeks as follows:

Average number of holidaymaker-weeks booked per licence	x	Number of licences	
113	x	1760	= 199,000 approx.

Total number of 'user-days' = 199,000 x 7 = 1,393,000

Expenditure in businesses near the waterways and on travel

The Reading University Survey found that holiday makers on the waterways each spent £6.29 on food, £3.59 on entertainment, £2.81 on travel and £2.31 per week on miscellaneous items in 1975. As expenditure on food included eating out, at local pubs, restaurants etc. as well as expenditure on essential foodstuffs which may not have been purchased locally, half of the expenditure on 'food' has been included in the estimate of spending accruing to local businesses. It is estimated that £25.60 (at 1979 prices) is spent locally per person per week of holiday.

Total expenditure is therefore:

Average expenditure per person per week	x	Number of holidaymaker weeks per year	
£25.60	x	199,000	= a Total of £5,094,400

Expenditure on hire of boats

Expenditure on the hire of boats and on hotelboats has been estimated (Appendix B2) to amount to £8,512,504 (£8,512,500)

The total expenditure of holiday hirers accruing to the waterways per year (at 1979 prices) is therefore:

Expenditure on hire of boats	+	Expenditure in businesses	
£8,512,500	+	£5,094,400	= £13,606,900

This is approximately £13,700,000

APPENDIX C      Uses of the BWB's Waterways and the Resultant Spending

C4.    Angling

As discussed in IWAAC's "Angling Report", it is difficult to estimate the number of anglers who use the BWB's waterways. In the "Angling Report" the Council estimate the number to be at least 170,000.

Total Number of 'User-days'

The Reading University Study of angling estimates that these anglers spend approximately thirty days per year angling, of which twenty days are spent on the waterways controlled by the BWB. This would indicate therefore a total of 3,400,000 'user-days'.

Expenditure

For these twenty days each angler spends on average £89.85 per annum on bait, tackle, club subscriptions, travel and incidental expenditure. (Reading University figure, updated to 1979).

The total expenditure of anglers on the BWR's system is therefore:

Average expenditure per year	x	Number of Anglers	
£89.85	x	170,000	= £15,274,500

This is approximately £15,275,000.

APPENDIX C      Uses of the BWB's Waterways and the Resultant SpendingC5.      Privately owned unpowered craft

In 1979 there were 5,150 unpowered private craft licensed and registered on the BWB's waterways. Since many of these are canoes, it is assumed that half this number (i.e. 2,575) are each used on average by two people on each trip. In one year the British Canoe Union estimate that at least 11 different people use the 2,575 boats capable of taking one person.

Expenditure on maintenance and other running costs

Some idea of the annual costs relating to unpowered craft can be estimated from details given in the Reading University Survey of Private Boating (Table 14, and associated averages) which indicate that the unpowered boats included in that Survey cost an average of £17.60 (Reading University figure, updated to 1979), to maintain and licence, and in running costs.

The total amount spent each year on unpowered craft is therefore:

Average cost of maintenance and running costs per annum	x	Number of unpowered boats		
£17.60	x	5,150	=	£90,640

Total number of user-days

The use of private unpowered boats is estimated to be as frequent as private powered boats, i.e. 30 times per year (see Appendix C1) by 7,725 people (see above).

The total number of user-days is therefore 231,750

Expenditure in businesses near the waterways

It is estimated that day visitors spend an average of £2.20 per person per visit on travel and incidental expenses.

Expenditure in businesses near the waterways by users of these unpowered craft is therefore:

Average expenditure per visit per person	x	Number of visits per year	x	Number of people	
£2.20		30		7,725	= £509,850

The total expenditure attributable to private unpowered craft on BWB's waterways is:

Expenditure on maintenance and running costs (including BWB income)	+	Expenditure in businesses near the waterways	
£90,460	+	£509,850	= £600,310

This is approximately £600,000.

Appendix "C"Uses of the BWB's waterways and the resultant spendingC6. Income to BWB from recreational activities on waterwaysa) Angling

In the Annual Report for 1979 the income to the BWB from angling is given as £50,800.

b) Boat licences \* and mooring permits

In the Annual Report for 1979 the total of income from all types of licences and mooring permits is given together with the numbers of licences issued for each category and the number of mooring permits issued.

Within each category of licence (hire, private, powered, unpowered) the amount paid for a licence varies with boat length. Mooring permits vary with boat length and also with the class of the mooring.

To obtain the total income to BWB from each category an average income for each category of licence and mooring permit is required. The total income as stated in the Annual Report may then be broken down and allocated to each category of licence and mooring permit according to the average cost of licences in each category and the average cost of mooring permits, and the numbers of licences issued in each category and the number of mooring permits issued.

Average income from a mooring permit, based on the cost of mooring a 40-ft. boat and the number of sites in each mooring class, was £118.07.

Average income from the licence fees for one boat for each category of licence, is determined by averaging the cost of licensing boats of different lengths to give the following:

£69.50	Private powered boat licence
£38.10	Private powered boat registered
£215.30	Hire boat licence
£100.97	Hire boat registered
£11.00	Private unpowered boat licence
£3.00	Private unpowered boat registered
£139.50	Houseboat licence

These average incomes can be used to weight the numbers of licences issued to each category according to the average income accruing to them. The total income given in the Annual Report 1979 as £1,331,500 can then be divided up amongst the categories in proportion to the weighted numbers of licences issued for each category and the weighted number of permits issued (as explained above). This will give an estimation of the income accruing to each category for 1979 as follows:

Private powered boat licences	£641,166	
Private powered boats registered	£156,087	
Mooring permits	£215,227	<u>Total income accruing to</u>
		<u>private powered boats</u> £1,012,480
Hire boat licences	£248,964	
Hire boat registered	£16,321	<u>Total income accruing to hire boat</u>
		<u>licences and registration</u> £265,285
Private unpowered boat licences	£32,993	
Private unpowered boats registered	£4,059	<u>Total income accruing to private</u>
		<u>unpowered boats</u> £37,052
Houseboat licences	£16,683	<u>Total income from licences</u>
		<u>and permits</u> £1,331,500

\* NOTE: Licence in this Appendix refers to licences and river registrations.

Appendix "C"C6. Income to BWB from recreational activities on waterways - continuedc) Total income accruing to hire craft

In addition to income from hire licences, the BWB received £243,000 from hire businesses by way of rents in 1979.

The total income to BWB accruing to hire craft is therefore the income from licences plus the income from rents, etc.

$$\begin{array}{rclcl} \pounds 265,285 & + & \pounds 243,000 & = & \underline{\pounds 508,285} \end{array}$$



Appendix "D"      Employment generated by spending accruing to the waterways

D1.      Employment Multiplier

- a)      Theory:      Mathematical models using the economic multiplier have been used in tourism studies recently to measure the effect upon an area of an increase in income to that region, by accumulating the additional employment which is generated as the additional income circulates around the businesses of the area.

There has been much discussion on this use of multipliers in the English Tourist Board's publication: "Tourism Multipliers in Britain" by Max Hanna (pub. 1976), and in two regional studies: David Henderson's "Economic Impact of Tourism in Greater Tayside" (1975), and Brian Archer's "Tourism in Gwynedd - An Economic Study" (1973).

- b)      Application:      The multipliers used in this Report are based on those for the national employment generated, given in Henderson's study. In applying these multipliers, it is assumed that some additional employment will ensue from any increase in turnover, however small. In reality the amount of additional turnover required to generate one additional job varies with different types of industry.

Henderson also found that the appropriate multiplier varied with different types of accommodation. The English Tourist Board found that boat hirers spent more than most other tourists and the preparation of boats for each week's hire required more staff than the maintenance of self-catering accommodation, such as cottages. However, the number of full time staff needed is less than in hotels, making hire craft operation more akin to the less labour-intensive guesthouse accommodation.

Moreover, the employment generated by the 19 firms offering hotelboats is likely to be greater than the economic multiplier relating to 'guesthouses' may indicate. Because numbers catered for on hotelboats are less than in most hotels, hotelboats are often more labour-intensive.

Private boaters are assumed to generate similar types of employment as do touring caravanners. Anglers and day-boaters are of course 'day visitors' to the waterways, with a similar spending pattern.

To ascertain the amount of employment generated, the national multipliers used by Henderson for each type of accommodation have been applied to the total expenditure of each group of users to give the total employment and the direct employment generated.

The expenditure of each group of users is set out in Appendix "B". The amounts spent by private boaters on maintenance, insurance, club membership, and by anglers on tackle, bait, club membership, are included because this Paper is concerned with the amount of employment generated by the waterways nationally, whether or not the businesses are located beside the waterways.

Appendix "D"      Employment generated by spending accruing to the waterwaysD1.      Employment Multiplier

<u>Type of user</u>	<u>Expenditure</u> <u>(£000s)</u>	<u>Multiplier per £1,000</u>	<u>Employment generated</u> <u>in total (i.e. direct</u> <u>and indirect)</u>
Hireboat and Hotelboat users	13,700	0.279	3,822
Private boaters (powered craft)	* 8,890	0.215	1,911
Private boaters (unpowered craft)	* 563	0.246	138
Anglers	15,275	0.246	3,758
Day visitors	3,202	0.246	788
			<hr/> 10,417

Total employment generated is approximately 10,500

<u>Type of user</u>	<u>Expenditure</u> <u>(£000s)</u>	<u>Multiplier per £1,000</u>	<u>Direct Employment</u> <u>generated</u>
Hire and Hotelboat users	13,700	0.148	2,028
Private boaters (powered craft)	* 8,890	0.107	951
Private boaters (unpowered craft)	* 563	0.121	68
Anglers	15,275	0.121	1,848
Day Visitors	3,202	0.121	387
			<hr/> 5,282

Total direct employment generated is approximately 5,000

\* Excludes income to BWB for licensing, registration and moorings (Appendix C6)

Appendix "D"      Employment generated by spending accruing to the waterways

D2    The numbers in each category of employment

Appendix "B1" has shown that - of those 5,000 employed directly as a result of expenditure by users on waterways, approximately 1,100 are employed by the boating industry as a result of all types of hire, hotel and restaurant boat activities.

The number of people employed as a result of private boat maintenance can be estimated. Approximately half the money spent on private powered boat maintenance is spent in boatyards, and this is 29% of the total expenditure attributable to private powered craft given in the tables above.

The employment generated in boatyards by expenditure on private powered boat maintenance is therefore approximately 29% of the total employment generated by private powered boating (i.e. 29% of 951) which is 275.

The total number of full-time job equivalents directly generated in boat hire and boatyards is therefore approximately 1,385. The remaining 3,615 (approx 3,500) jobs generated directly are created in the various establishments (cafes, shops, pubs,) which serve the users of the waterways. (See Appendix "B2").

The British Waterways Board employ some 3,000 people. In addition, there are 2,000 people employed in the boat building industry who are directly dependent upon the inland waterways. (Appendix "B3").

The supply of components and materials needed for the construction and repair of craft on BWB waterways provides a further 2,000 jobs. (Appendix "B3").

There are also some 5,500 full time job equivalents created indirectly through the additional orders that the businesses directly serving the waterways place with their suppliers, on account of users' expenditure, and the orders that suppliers place with their suppliers in turn.

Appendix "E"Returns to the Exchequer

- a) Income Tax: The spending of tourists and recreational users on the waterways generate the equivalent of 10,500 full-time jobs (See Appendix "D"). Using the average weekly earnings for all industries and services given by the Department of Employment for April 1979, an average annual wage of about £4,300 is obtained.

The employment generated by users gives rise to the following wages bill:

10,500 employees earning £4,300, gives a total of £45,150,000.

The 2,000 people employed in the boat-building industry earn a total of:

(2,000 employees earning £4,300 )                      £8,600,000

The total wages bill of the BWB, including staff directly concerned with freight transport, was £14,498,020 in 1979.

The average taxation rate to take into account various allowances is 20%, (a figure provided by the Inland Revenue for 1979).

The return to the Exchequer through taxation attributable to employment generated by the recreational use of the waterways is therefore:

Employment generated by users	£9,030,000
Employment generated by boatbuilding	£1,720,000
	<hr/>
	£10,750,000 (approx)

To this must be added a proportion of the £2,900,000 returned in taxation by staff of the BWB. However, it is almost impossible to delimit exactly the proportion of the total working time which each member of staff spends on activities which enable the waterways to be used for recreation.

For convenience, therefore, the whole of the £2,900,000 is added to give a total return to the Exchequer through Income Tax of approximately:

£13,650,000 in 1979

- b) Value Added Tax: In 1979 tripboats were zero rated for VAT, but the standard rate of 15% applied to the hire of boats, restaurant boats, hotelboats and the maintenance of private boats by boatyards from mid-June.

From Appendices "B2" and "C " the total turnover on these items is approximately £14,500,000, giving a return of £1,900,000 in VAT.

Appendix "E"      Returns to the Exchequer continued

Value Added Tax

From Appendix "B2" the total turnover of boat-building attributable to the BWB's waterways was £14.6m. in 1979, giving a 15 % VAT return of £1,900,000 approximately.

VAT of 15% also had to be paid on licences and permits issued by BWB.

From Appendix "B6" the total income received for licences\* and permits in 1979 is £1,315,000 (approximately), giving a VAT return of £171,522.

The total VAT returned to the Exchequer from the boating industry and BWB, which is attributable to the recreational use of the BWB's waterways, is therefore approximately £3,971,000 in 1979.

- c) Interest: In 1979 the total interest paid by the Board on the commencing capital debt in 1968, and on loans from the Secretary of State for the Environment amounted to £983,700.

\* NOTE: This excludes houseboat licences and rents received from hire operators, and boatyards.

APPENDIX "F"      AN EXAMPLE OF THE BENEFIT TO THE COMMUNITY

Businesses advertised on the canal bank - Llangollen Canal and Shropshire Union Canal (Main Line) from Trevor to Nantwich - May 1979.

<u>Location</u>	<u>Description</u>
Trevor	Anglo-Welsh Canal Shop
	"Anchor Pub", near Pontcysyllte Aqueduct
Bridge 21	"Bridge Inn", advertising food and Banks' beer
Bridge 19	"New Inn", advertising restaurant, bar snacks, and Banks' beer
Bridge 18	"Ship Pub" at Rhosweil, extensively advertised - Border Beers
Bridge 17	"Lion Inn", advertising food and moorings for patrons; garage beside it next to Canal for fuel
Bridge 13	Home-baked bread shop on canal bank
Bridge 12	Fish and chips, ice creams advertised from lock cottage
Bridge 11	Mad Jack Mytton's - advertising restaurant and snacks, crafts, groceries, water, overnight moorings, ice cream
Bridge 5	Maestermyn Marine, advertising groceries, chandlery, water, souvenirs, craft shop
Bridge 5	Frankton Post Office and general stores, advertising frozen foods, sweets, ices, minerals, tobacco, off-licence and groceries
Bridge 50	Small holding advertising eggs for sale
Bridge 46	Black Prince Marina and shop, advertising groceries, off-licence, chandlery, overnight moorings, caravans, slipway, hire base, water point, elsan disposal etc.
Bridge 32	Bridge Canal Cruisers, advertising fuel, chandlery, pump-out
Bridge 32	Bridge Hotel advertised
Bridge 29-30	Shop advertising home-made cakes, pies, meat, eggs, cream, yoghurt, and canal ware
Grindley Brook at top of Flight	Shop beside locks selling maps, postcards, canalware, souvenirs, milk, eggs, icecream, bread, groceries.
Grindley Brook	Garage selling fuel and advertising icecream
Lock Willey Moor	Willey Moor Lock Inn beside the lock - pub and licensed restaurant advertised
Wrenbury	Dart floating canal shop selling crafts
	"The Cotton Arms" pub advertising food and beer
	"Dusty Miller" pub advertising Marston's beers
	VG Stores advertised as 'high class walkround stores'
	Cathedral Cruises
Bridge 17	Shop, advertising groceries
Bridge 6	Shop at Burland advertising groceries
	Garage at Burland advertising petrol/fuel
Bridge 1	
Hurleston Locks	Temporary shop opposite lock cottage (moved from Wheaton Aston whilst Tyrley Cutting stoppage was in progress.)

APPENDIX "G"ACKNOWLEDGEMENTS TO MAIN SOURCES OF INFORMATION

The Council would like to express their sincere appreciation for the help of the following organisations and individuals, and for the use of their publications:

The British Waterways Board	Recreational Use of Inland Waterways - data (1975-76) Use of Waterways by Private Boats - Log Book Survey (1978) Boats and their Owners (1977) Annual Report and Accounts (1979) Waterway Users' Companion (1979)
Mrs S. Ash & Mr M. Stabler, Reading University Amenity Waterways Study Unit	Reports: Angling (Published 1977-78) Private Boating Holiday Hire Informal Activities Summary Report
Association of Pleasure Craft Operators	Survey of Representative Sample of Member Firms (1978) - unpublished
Staffordshire & Worcester- shire Canal Society	Survey of Members' Use and Expenditure - (1979) - unpublished
Ship & Boat-Builders' National Federation	Statistical Review (1978 - 79)
English Tourist Board	Tourism Multipliers in Britain (1977) Report of Hire Cruiser Industry Survey (1977) Holidays on England's Rivers & Canals (1978)
Mr Max Hanna	Regional Tourism Multipliers: Their Findings and Uses. Leisure Studies Association Conference (1977)
Mr David M. Henderson assisted by Mr R Lee Cousins Tourism & Recreation Research Unit, University of Edinburgh	Economic Impact of Tourism - A Case Study in Greater Tayside (1975)
Mr B. Archer et al.	Tourism in Gwynedd: An Economic Study (1975)
Mr B. Archer	The Economic Costs & Benefits of Tourism (1976)

The Council have also drawn on the figures in their own Reports, as follows:

Inland Waterways Amenity Advisory Council	Priorities for Action on the Waterways of the British Waterways Board (1975). Angling on the British Waterways Board's System (1975)
Collection of information and research	Miss M-A. Goode IWAAC July 1980