

BRITISH WATERWAYS BOARD

ANNUAL REPORT AND
ACCOUNTS
1964



LONDON
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BRITISH WATERWAYS BOARD

Annual Report and Accounts
for the year ended
31st December, 1964

*Presented to Parliament in pursuance of Sections 24(3) and 27(8) of
the Transport Act 1962*

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BRITISH WATERWAYS BOARD

Melbury House,
Melbury Terrace,
London, N.W.1.
24th May, 1965.

Dear Minister,

I submit, in accordance with Section 27 of the Transport Act 1962, the Second Annual Report of the British Waterways Board, covering the year 1964. The Board's Statement of Accounts for the same period, which appears in Appendix IV, was sent to you, with a copy of the Auditors' Report, on the 17th May, 1965.

Yours sincerely,

A handwritten signature in dark ink, appearing to read 'John Hawton', with a stylized flourish at the end.

Chairman.

The Rt. Hon. Tom Fraser, M.P.,
Minister of Transport,
St. Christopher House,
Southwark Street,
London, S.E.1.

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CHAPTER I

THE SECOND YEAR

1. This is the Board's second Statutory Annual Report and Statement of Accounts. It records that—following the 26 per cent. cut in deficit from 1962 to 1963—the Board have been able largely to contain substantial increases in costs. Besides describing the main features and happenings of the year, it comments briefly on the evolution of policy. The form is substantially the same as that of the first Annual Report: but water sales, water legislation and water studies are so important to the Board that the main comments on these matters have been drawn into a single chapter.

Membership of the Board

2. No changes occurred in the membership of the Board during the year. The membership as at 31st December, 1964 is set out in Appendix I.

Appointment of Auditors

3. The Minister of Transport, in accordance with Section 24 of the Transport Act 1962, appointed Messrs. Cooper Brothers & Company of Abacus House, Gutter Lane, London, E.C.2, to audit the accounts of the Board for the year 1964.

The Evolution of Policy

4. At the end of January, 1964, the Board published their Interim Policy Report, "The Future of the Waterways". Although it is not intended in this Annual Report to put forward general proposals on policy, there are certain themes in the Interim Policy Report which should not be left in silence.

5. In the Interim Policy Report the Board pointed out how badly a clear general policy for the future was needed. It outlined the various possible policies between which a choice would have to be made and it drew attention to the need for further work.

6. The need for a clear and understood general policy has certainly not diminished in urgency in the last year. Practical difficulties have for many years arisen because those who are interested in one or more of the many aspects of waterway use are uncertain where they stand. These difficulties arise still: they arise increasingly. The Board feel that they ought to reiterate this now because there has perhaps been a degree of misunderstanding about the relationship between the urgent need for general decisions on the one hand, and the further work which the Board has in train, upon the other. The Board are engaged in a comprehensive engineering survey (as is described in Chapter III). They have also in hand a number of other studies of both the transport and non-transport aspects of their work. These studies, because they are all of them built on the Board's management experience, differ from the many surveys and inquiries made by "outside bodies" in the past—though, of course, the Board do use the wisdom of those earlier studies, as appropriate. The work that is in

hand is intended to serve management purposes and also to block in the details and refinements of future policy and management action. But it most assuredly does not follow that no decisions on policy could, or should, be taken until the last of these studies is finally complete. Indeed, to say that this was so would be to embrace postponement sine die. It would have been in clear conflict with the need for urgency. And it would be unrealistic. Naturally and inevitably one enquiry leads to another. It is true of the waterways—as of other matters—that fact-finding and analysis in all its forms would be complete only when the subject of study is finally and conclusively dead.

7. The Board said—in sending their Interim Report to the Minister—that they were in a hurry. They still are. Indeed, they are in more of a hurry than they were, because the five year “allotted span” of the Transport Act is now nearly half completed. While they are not in a position to forecast dates, they hope that they will be—before very long elapses—in a position to send to the Minister of Transport for his consideration their mature thoughts on policy. The Minister is, of course, aware of the Board's thinking on this matter of urgency.

Financial Result

8. The Board's accounts for the year are as at Appendix IV and the general picture which they show is commented on in Chapter V.

9. Briefly, the financial result of the Board's second year in business was that there was a deficit of £717,396 (before charging interest) compared with £749,435 in 1963—an improvement of £32,039, following an improvement of £570,000 in the previous year. When interest is taken into account, the total figures for the year are £1,543,929 for 1964 compared with £1,523,002 in 1963 (a worsenment of £20,927).

10. The deficit was made up as follows:—

	£
Principal activities (deficit)	456,075
Less: Other Revenue	412
	<hr/>
	455,663
Central Charges	236,733
Provision for internal insurance	25,000
	<hr/>
Deficit before charging interest	717,396
Interest	826,533
	<hr/>
TOTAL	1,543,929

11. In comparing the 1964 out-turn with 1963 it is to be borne in mind that there were important extra costs. There were wage and salary increases which, on the basis of the labour force at the beginning of the year, meant extra costs of £120,000 against revenue account and there were increases in commodity prices amounting to at least another £20,000. There were also increases on the costs of services, rates, etc. As described in Chapter III, there were a series of engineering difficulties on the Caledonian Canal which involved special and emergency expenditure of no

less than £70,000 : there was nothing comparable to this on any canal in 1963. The actual process of reorganisation involved extra expenditure on staff moves, office adaptation, and so on, amounting to approximately £30,000. In total, all these extra items amount to about a quarter of a million pounds.

12. There were also extra interest charges amounting to £52,966, a significant proportion of these, in the Board's special circumstances, arising from capital investment which did not permit the creation of extra revenue.

13. The financial out-turn of the principal activities was as follows :—

	1964	Better(+) or worse (-) than 1963
	£	£
<i>Deficits</i>		
Waterways operation and maintenance	858,671	+55,927
Freight carrying fleets	99,396	+ 259
	958,067	
<i>Surpluses</i>		
Warehousing and terminal services	109,835	-29,158
Docks	41,523	- 1,816
Non-operational estates	350,634	+16,115
	501,992	
Net deficit	456,075	+41,327

14. It was not to be expected that the big saving achieved in 1963 could be extended to further similar cuts in deficit in subsequent years. Quite apart from the very serious increase in wage etc. costs already mentioned, it must be borne in mind that the Board's unavoidable commitments in expenditure are obviously not susceptible of indefinite reduction ; moreover, many of the sources of revenue are (for a variety of reasons) inelastic to some degree. In spite of this the gross revenue for the principal activities increased by 2.6 per cent. and total expenditure on those activities (even though pushed up by the factors mentioned in paragraph 11 above) increased by only 1.5 per cent.

Co-operation

15. In their Interim Policy Report the Board emphasized the importance they attached to consulting with the numerous bodies, both national and local, who are interested in various aspects of inland waterway matters. In this connection the Board value the periodic discussions with the National Association of Inland Waterway Carriers. They also value their continuing discussions with the Inland Waterways Association and other national and local societies. It would be too much to expect that these discussions would always produce complete agreement. Viewpoints differ : and the Board must be especially mindful of their duty to minimise the call on public funds. But the Board feel that by frank exchanges of views it has been possible to reach better understanding on many subjects and to reduce the number of points of difference. The first steps in practical co-operation between the Board and voluntary societies are described in Chapter VII.

Staff

16. 1964 was the year when the major management reorganisation announced in November, 1963, came into effect. The Board were able to bring about the crucial change (from the previous "Divisional" organisation to the new "Functional" one), a month earlier than originally planned, i.e. on 1st March, not 1st April. The progress of the reorganisation—which is described in Chapter VI—inevitably meant changes of work for many members of the staff and changes of place of work for quite a number. In spite of these changes the new organisation has been established and the disturbance to the progress of the Board's work has been kept to a minimum. The Board take this opportunity to record their thanks to the staff at all levels for their work during the year. They are also anxious—as in 1963—to record their appreciation of the important and constructive part that has been played by the Trade Unions and Staff Associations.

17. A list of the officers in charge of the Board's departments is at Appendix II.

British Waterways Bill

18. Both because the general background of policy is not yet determined and because of the reservations (explained in paragraph 79 of the Interim Policy Report) about the Private Bill procedure, the Board have been reluctant to propose piecemeal legislation. They promoted no Bill in the 1963-64 Session. In the course of 1964, however, it became apparent that certain motorway plans would be made much more costly if Parliamentary action was not taken in the current Session. The canals affected were the northern end of the Lancaster Canal and a small unused branch—the Walton Summit Branch—of the Leeds and Liverpool Canal (this latter being in law, as it happens, part of the south end of the Lancaster Canal, though there is now no physical connection with that waterway). As a Bill was inevitable anyway (if large unnecessary expenditure of public funds were to be avoided), the Board have added a few other matters where speedy action seemed to them to be in the public interest; but they have confined themselves to matters which are urgent.

Scottish Provisional Order

19. At the request of a number of local authorities the Board have applied for a Scottish Provisional Order to relieve them from their obligation to keep open the Union Canal from Edinburgh to Falkirk. This application is unopposed. The Canal is no longer used for navigation and the closure will facilitate a number of important highway schemes.

CHAPTER II

THE COMMERCIAL YEAR

20. The Board's operations are divided into five principal activities. Of these *waterways* (that is to say, revenue from tolls and dues, water sales, pleasure craft licences etc., offset by expenditure on maintaining and operating the waterway track) showed an improvement compared with 1963: so did *non-operational land and buildings*. The out-turn for *fleets and docks* was virtually the same as in 1963. The out-turn for *warehouses and terminal services* was not as good as in 1963. This chapter examines these results. It covers both the revenue and the related expenditure, save that, for convenience, expenditure on *waterways* is dealt with in Chapter III.

General Trends

21. Two general trends stand out. First, competition became even more intense in 1964. In their toll charging policy and also in the rates for combined carriage and warehousing, the Board had constantly to bear in mind that they were in competition for the bulk traffics which other forms of transport also found attractive. The result is that a 1 per cent. loss of total traffic (in terms of tons—or 4·3 per cent. in terms of ton miles) is accompanied by a cut of no less than 6 per cent. in toll income. Second, the year showed a continuation of the long established tendency for the major waterways to become (in a transport context) relatively more important and the others relatively less important. The percentage of total traffic (in terms of ton miles) covered by the major transport waterways is:—

1962	...	...	...	...	...	89·6
1963	...	...	...	...	...	93·1
1964	...	...	...	...	...	94·8

Major Transport Waterways

(a) Tonnage and Tolls

22. The Interim Policy Report provisionally classified 12 waterways as "Major Transport Waterways". They were:—

- Aire and Calder Navigation
- Sheffield and South Yorkshire Navigation
- Trent Navigation (part)
- Calder and Hebble Navigation (part)
- Fosdyke Navigation
- Weaver Navigation
- Gloucester and Sharpness Canal
- River Severn
- Lee Navigation (below Enfield)
- Grand Union Canal (below Uxbridge)
- Caledonian Canal
- Crinan Canal

23. The Interim Report, however, was careful to explain that this was not a grouping based on a judgment of what waterways might be self-supporting in a transport context (it is, for instance, difficult to regard the Caledonian Canal in that light in present circumstances) but rather as waterways which appeared by their size and nature to be a part of the national transport system.

24. The tons conveyed in 1964 were about $8\frac{1}{2}$ million, which was 1 per cent. (83,000 tons) less than 1963. The ton miles of goods carried on these waterways were 134 million, a reduction of 4.3 per cent. on 1963 and produced a toll income of £933,465, a reduction of £57,451 or 5.8 per cent.

25. It will be seen from Statement F.1 that there was a fall in coal tonnages arising from temporary (and subsequently overcome) supply problems. The tendency for liquid traffic to decrease has continued; but this was in 1964 more than offset by increases in general merchandise.

26. The upsurge in traffic shown in the last few months of 1963 lasted until the summer since when, although coal tonnages have improved, those of other traffics have declined slightly. Outstanding among the major waterways was the Trent Navigation which had an increase of nearly 5 per cent. in tonnages of general merchandise and the Calder and Hebble where tonnage improved by about 10 per cent.

(b) Particular Transport Developments

Aire & Calder Navigation : Ferrybridge "C"

27. It was announced during the year that, when the new Ferrybridge "C" power station of the Central Electricity Generating Board is fully in operation, at least $1\frac{1}{2}$ million tons of coal annually will be carried by water. The coal will be carried by independent carriers and a new type of craft has been developed by the carriers concerned for the purpose. A barge tippler has been installed at the power station. To assist the traffic, the Board, for their part, are undertaking a programme of improvements to the navigation, though the competitive toll rates which had to be quoted to secure the traffic limit what can be done in this direction.

Sheffield & South Yorkshire Navigation

28. In the course of the year the Board put in hand a detailed examination of the prospects for, and implications of, expanding the Sheffield and South Yorkshire Navigation. To this end they commissioned The Economist Intelligence Unit to make a survey of the traffic potential of the area served by this navigation. They also invited the National Association of Inland Waterway Carriers to consider questions of operational requirements and craft design so that if expansion is found to be justified it can proceed on the most useful lines. At the end of 1964 these studies were still in train.

Access from the Lee Navigation to the Thames

29. The Board have under consideration a scheme for making a waterway connection between Limehouse Cut and Regent's Canal Dock. This will enable the new and improved Regent's Canal Dock Ship Lock to be

used as a connection between the Lee Navigation and the Thames, and it will avoid the need to replace Limehouse Lock (which would otherwise have to be rebuilt within quite a short space of time). Rebuilding without this alternative route would lead to severe disruption of traffic and the Board feel, moreover, that the new route will have operational advantages. The Board are including in the British Waterways Bill provisions for the enabling powers which are required in connection with this scheme.

Caledonian Canal: Corpach

30. The development of the new quay at Corpach basin for the Scottish pulp traffic was completed during the year and the sea lock at Corpach was extended so that it can take ships of 203 ft. in length and 35 ft. in beam into the basin.

Caledonian Canal: Mechanisation

31. At the time the Board was created a programme of lock mechanisation on the Caledonian Canal was about half completed. The Board considered this matter most carefully and came to the conclusion that, unless mechanisation was completed, the canal would, within a few years, drift into a condition of inoperability. Although the financial position of this canal gives them cause for concern, the Board decided that it was right to continue and complete the programme of lock mechanisation.

Gloucester and Sharpness Canal: Monk Meadow

32. The Board own a 28 acre site alongside their Gloucester and Sharpness Canal in the City of Gloucester. It is hoped to develop this site for local industry and develop wharves and handling facilities along the canal frontage to accommodate coasters of up to 600 ton capacity and barges. The first stage of this development—which was based on an agreement covering a new traffic of 5,000 tons of timber per annum—was commenced during 1964 and work started on the construction of part of the wharf for receiving by coasters and barges. The first consignment of timber arrived in April, 1965.

Fleets on the Major Transport Waterways

33. Of the 133,709,000 ton miles of traffic conveyed on their waterways 23.3 per cent. was carried by the Board. The rest was carried by independent carriers.

Coal Compartment Boat Fleet

34. This fleet which operates on the Aire and Calder and the Sheffield and South Yorkshire Navigation made a loss of £15,609. This compares with £4,458 in 1963. The fleet, however, made a contribution to toll revenue much in excess of this deficit—i.e. of £47,832.

35. Pitch traffic was lost during the year and was only partially offset in terms of income by increases in coal traffic. Moreover, because of the extreme age (over 60 years) of some of the compartment boats, the Board are having to incur increased maintenance costs. There was an increase of £9,000 in 1964. The cure for this excessive maintenance expenditure is to replace these ancient boats. The Board are doing this progressively. For the compartment boat fleet generally the second half of 1964 was busier than the first.

Other Wide Boat Fleets

36. The Board's other fleets operate on the Aire and Calder, Sheffield and South Yorkshire, the Trent and the Severn. As indicated in the Board's first Annual Report, the operation of the wide boat fleet in the north-west terminated on 31st December, 1963: this is reflected in both the gross receipts and tonnage carried.

37. The total tons (in round figures) carried by the Board's fleets was 293,000—a reduction of 88,000 tons on 1963. This reduction is fully accounted for by the cessation of the north-west fleet (minus 90,000 tons). It was to a small extent offset by an increase in the tonnage carried by the remaining fleets, of 2,000 tons.

38. The financial out-turn for the year shows acutely the difficulty of maintaining and augmenting revenue in the face of competition. Also there were some special problems during the year. The principal one of these was the need to incur increased maintenance costs (particularly on the Severn Fleet where there were significant arrears of maintenance). Exceptional carriage expenditure during the period of the developments at Knostrop Depot also had an adverse effect on the out-turn. The working deficit for the year (after contributing to the waterways a toll income of £58,251), was £74,473—an increase of £10,562 over 1963. The Board have in hand a study of the economics of the various types of traffic handled with a view to establishing a more comprehensive and up-to-date knowledge of which of these traffics show a reasonable rate of return in present circumstances.

Transport Out-turn for Other Waterways

39. "Other" waterways in this context means all except the major transport waterways. Tolls and dues from these other waterways amounted to £38,960 that is to say 4 per cent. of total income from tolls and licences on commercial traffic. This figure was £8,262 less than in 1963 and it must be pointed out that although these other waterways carried 5.2 per cent. of the traffic in terms of ton miles, they contribute not even that percentage to the revenue.

40. During the year the Board completed the process of withdrawal from operating narrow boat fleets—on which £75,000 was lost in 1962. The reasons for the withdrawal were described in the Interim Policy Report. Although the Board run no fleets they do still, as part of the Brentford/Birmingham Depots, continue to operate four pairs of narrow boats.

41. When 1964 began the Board had already withdrawn from operations in the south-east, but they were still in process of reducing their operations in the north-west. Some private operators expressed an interest in operating the boats in that area on a licence (as distinct from toll) basis, and the Board—having in mind particularly that some of the "boat people" might welcome an opportunity to continue their trade—agreed to extend the experimental licence arrangements introduced on the Grand Union in 1963 to the parts of the Shropshire Union Canal and the Trent and Mersey Canal (with through-route use of the River Weaver from Anderton to Weston Point, in order to take up cargoes at the latter place).

42. The experimental licensing arrangements have been made for a period of two years. In the case of the south-east licences, the two year period terminates at the end of 1965. For the north-west licences (which, as just mentioned, started significantly later) the end of the period is 31st December, 1966. During the year the Board were asked by the largest of the operators to extend the period of licensing to a total of ten years. This they could not see their way to do. The canals on which the licensed narrow boats operate include many of those which lose money. Until decisions on waterway policy generally are taken it would be entirely inappropriate for the Board to enter into long term commitments to maintain these many miles of waterway to the standards required for commercial navigation.

43. The narrow boat licensing experiment has evoked a great deal of public interest. Some of the statements which have been made about its beneficial effect for the waterways have shown a rather incomplete understanding of the financial position. The licences have been fixed at £21 a year for the north-west and £25 a year for the south-east. These contrast with an average annual toll income (under the previous arrangements) of about £150 per boat. This, of course, benefits the operators but it means that—on a constant number of boats—the revenue from commercial traffic (which goes towards the upkeep of the waterways) is only one-sixth of what it was.

44. The extension of the licensing arrangements to the north-west still excludes a number of narrow canals. These are broadly of two kinds. For one type the Board would, by giving special encouragement to the re-introduction of commercial traffic, have been morally committed to maintenance costs exceeding those required under the moratorium section of the Transport Act 1962. For the other type there were features of an existing pattern of operations (e.g. a large number of boats with a low level of individual utilisation) which made the application of the licensing system doubtful or inappropriate.

Warehouses

45. The working results for the warehousing and terminal services activity are summarised at Appendix IV, Statement D.1(iii).

46. The general financial comparison with 1963 is disappointing. But 1963 was a record year and showed an improvement over 1962 of 34 per cent.—£35,303. The 1964 reduction of £29,158 in the working surplus nevertheless leaves a final result some £6,000 better than 1962, notwithstanding the important increases in salaries and wages costs.

47. The demand for storage remained high in some areas; but in Gloucester, Leicester and Birmingham demand was less buoyant. The improved facilities at Brentford and Rotherham (which became available in July and September respectively) offset these trends to some extent. The improved facilities at Leeds were not completed until early 1965 so that no benefits have accrued to the Board in this year's results.

48. Gross receipts improved by about 2 per cent., resulting from an increase in some of the Board's charges to meet increased costs. This however was more than offset by increased cost of renewals of structures at Gloucester and Brentford.

49. In addition, and as a result of the general management reorganisation of the undertaking it became necessary to review the allocation of local administration costs. This has resulted in a new apportionment which brings about an increased attribution of costs to the warehousing activity of £22,609.

Docks

50. Appendix IV, Statement D.I(iv) summarises the year's results for the Board's principal docks—Regent's Canal, Weston Point and Sharpness.

51. There was an increase in revenue of slightly more than £100,000 resulting in a working surplus of £41,523, only marginally less than in 1963. Weston Point and Sharpness had a particularly active year and interest in the facilities continued. Regent's Canal Dock, in spite of slightly fewer arrivals, increased its revenue, but the advantages from this were more than offset by an increase in the charge for dredging and by increased maintenance costs.

52. The total tonnage passing in and out of the docks was in excess of 1½ million tons, an increase over 1963 of 23,000 tons; and, although there were slightly fewer ships, the total net registered tonnage was greater.

Water Sales

53. As described in Chapter IV, sales of water amounted to £688,070 in 1964. This was an increase of £79,013 over 1963.

Out-Turn on Non-Operational Estates

54. The Working Results are appended at Appendix IV, Statement D.I(v) from which it will be seen that Gross Revenue at £458,768 shows an improvement over 1963 of £17,985 or 4 per cent. That the improvement is not greater reflects in some measure the difficulties which obtain generally of recruiting, in a highly competitive market, suitable professional staff necessary to maintain and increase the estate income.

55. Some savings have been effected in the level of maintenance. The cost of administration reflects a substantial proportion of unavoidable work which arises on an estate exceptionally diversified in nature. Much of this is not directly remunerative but it is essential for the preservation of existing revenues and for the safeguarding of future potential.

56. The working surplus was £350,634—an improvement over 1963 of £16,115.

Property Management

57. The preceding paragraphs deal with one aspect of the Board's estate work. There are, however, many other aspects to this work. The following table may give some indication of the volume of negotiations. There are, in addition, Town and Country Planning Applications and Appeals, examination of Reviews of Development Plans, rating matters, purchases of annual rent charges (these amounted to £14,695 in the year) and questions about public rights of way.

Type	Northern Region	Southern Region	Scotland	Total
Leases and Tenancies	162	255	154	571
Purchases	6	7	1	14
Sales	15	32	13	60
Wayleaves, Licences and Easements ...	253	270	50	573
Angling Agreements	15	16	—	31

Pleasure Craft

58. As foreshadowed in the Annual Report for 1963, the control and issue of licences for pleasure craft was centralised in the Board's headquarters at Watford.

59. During the year the Board issued or renewed 11,148 licences (an improvement of 20.5 per cent. over 1963). The continued expansion of this activity—which reflects the intense and growing national interest in many forms of outdoor leisure pursuit—is a matter to which the Board attach much importance and give much thought. The following table sets out the position in more detail.

Licences Issued

	1964	1963	Inc./Dec.	%
Cruising Licences				
Powered				
Private	5,400	4,382	+ 1,018	+18.8
Hire Craft Operators	468	411	+ 57	+13.8
Unpowered	3,409	2,753	+ 656	+23.8
Yacht Basins	601	566	+ 35	+ 6.1
Residential	316	334	— 18	— 5.3
Berthing	954	801	+ 153	+19.0
TOTAL	11,148	9,247	+ 1,901	+20.5

60. The increase in the number of licences in 1964 was greater than in the previous year. It will be seen that the largest percentage improvement was for unpowered craft but there were also encouraging increases in the number of licences for powered craft. The revenue from pleasure craft licences amounted in all to £81,585—an increase over 1963 of £4,807 (6.2 per cent.). This was markedly less than proportionate to the increase in the number of licences issued because a large part of the increase in numbers was made up of the cheaper sorts of licence—that is to say those for unpowered craft or for short periods.

Changes in the licensing system for 1965

61. In January, 1962, the Board's predecessors introduced what became generally known as a combined licensing system, which consisted of one payment for cruising and mooring. Since the Board assumed responsibility they have been increasingly concerned at the difficulties arising from the application of the scheme and in 1964 they put in hand a radical examination of the problem with a view to establishing a sound basis of growth for the future. Their studies revealed an overwhelming case for a different approach and a new scheme has been announced for introduction on the 1st April, 1965.

62. The most important new feature of the arrangement is that licensing of craft will be treated quite separately from the provision of British Waterways Board moorings (that is, mooring against directly controlled Board property, including towpaths etc. but excluding property leased or rented to anyone else).

63. With the exception of craft using solely the river navigations mentioned in paragraph 65 the craft licensing system is compulsory. Craft will be required to be licensed in accordance with the Board's conditions, and when licensed, will be entitled to use any of the Board's waterways (including the river navigations) available for pleasure craft.

64. By contrast, the use of the Board's moorings will be—naturally—a voluntary matter. Owners will pay mooring charges when they choose to moor against Board property (as defined above) and it is only the mooring they have paid for at a stated place which they will be entitled to use. To facilitate cruising however, boats away from their base area may make short stops at Board moorings for a period of up to 14 days without charge. This last mentioned facility will be available to all craft, whether normally based at Board moorings or not.

River Navigations

65. The Board's powers to require pleasure craft to be licensed on some of the river navigations—including the Lee, Stort, Severn and Trent—are limited by the existence of public rights of navigation. Pleasure craft owners do not require a licence to operate in such cases; but to pass through locks they must be in possession of a valid licence or lock pass or pay the relevant lockage charges. It has been decided in the interests of administration to make the lock pass more attractive to users by reducing the lock pass charge for six months by approximately 10 per cent. and increasing the lockage charges by a similar amount. The opportunity has also been taken to introduce a measure of standardisation in the lockage charges so as to reduce the complication of varying charges.

66. The introduction of this scheme will it is hoped bring about a clearer and improved set of arrangements for those using these facilities; but the underlying statutory situation is not in all respects satisfactory. This is a policy matter on which the Board may be obliged to make proposals at the appropriate time.

Pleasure Craft Literature

67. During 1964 the Board continued the sales of their Inland Cruising Booklets and sold to the public about 11,500 copies. During the course of the year five of the booklets—Llangollen, Shropshire Union, Oxford, Grand Union (Regent's Canal Dock and Brentford to Braunston Junction), and Trent & Mersey (Preston Brook and Great Heywood including Staffordshire & Worcestershire Canal to Autherley Junction)—were brought up-to-date and republished. The remaining booklets have all been reviewed and will be republished during the early months of 1965. The Board hope to publish a booklet on the Lancaster Canal during 1965.

CHAPTER III

THE ENGINEERING YEAR

Weather Conditions

68. Day to day engineering problems for the Board always begin in the inescapable vicissitudes of wind and weather. Neither at the beginning nor end of 1964 was there anything approaching the exceptional ice conditions of 1963. The weather problems in 1964 arose not from cold, but from drought. Over the country as a whole the year was one of the driest on record. The maintenance of water supplies presented difficulties at a number of points on the system. Fortunately, however, the driest spell did not occur until the autumn, when the requirement for lockage water diminished as the pleasure craft season drew to a close. Where commercial craft navigating at full draught on the Trent and other navigations experienced difficulty at neap tide as a result of low water levels caused by low river flow, assistance was provided by the Board's tugs which carried out patrols in the shallow areas. Many craft were assisted in this way and no serious delays resulted.

69. The heavy rains in December in the northern half of the country restored the position to some extent, although at the expense of some flooding to which reference is made elsewhere. By the end of the year, however, many of the Board's reservoirs had not yet reached their usual level for the time of the year, and a number of artificial canals (including the Grand Union system) pass through parts of the country where the rainfall was as much as a third below the average for a normal year. The water supply position gives rise to some anxiety for the summer months of 1965.

Waterway Operating, Maintenance and Dredging

70. In the course of the year the Board spent two and a quarter million pounds on operation, maintenance, and dredging of waterways. Maintenance expenditure covers a wide range of work. At one extreme there are fairly big jobs like steel piling with piles of up to 15 ft. in length (costing about £30 for each yard of work): the size of the jobs diminishes progressively to the day-to-day work like hedge cutting, towing-path repairs and the clearance of culverts. In total, expenditure on operating, maintenance and dredging in 1964 on the English canals was 3.7 per cent. less than in 1963. The overall result after including the Scottish canals, was an increase of 0.1 per cent., the increase being caused by the heavy expenditure incurred on the Caledonian Canal during the year which exceeded the 1963 figure by £70,217.

71. The Board's policy on maintenance has been to concentrate effort where it is really needed. In particular it has been their purpose to have regard to the actual current uses on individual waterways and not to establish the standards of maintenance by any arbitrary categorisation determined exclusively from the degree of commercial usage. In short, the endeavour has been to work upon a more flexible policy.

72. Wherever possible, new techniques are introduced to lessen maintenance costs. An example of this is the increased use, where appropriate, of chemical methods in the control of weeds and grass on the towing-paths. This is proving increasingly successful, though, of course, great care has to be taken in some areas to avoid damage to rare wild plant species, growing crops and fish life. In the matter of chemical control of water weeds and sedges, some progress is being made; but numerous problems remain. A "break through" on this front could be a major source of economy to the Board.

Dredging

73. The total dredging output during the year—nearly 1.3 million tons—showed a slight increase over 1963. Dredging on the major transport waterways has increased considerably (3.56 per cent.)—but at decreased cost—and there has also been an increase in dredging on some canals now serving as important water channels. These increases have been offset by a reduction of dredging effort on canals where there is less utilisation than there used to be.

Bank Protection

74. Bank protection can take a variety of forms. At one extreme there is heavy steel sheet piling. Less substantial than steel sheet piling but still a very strong form of protection is concrete sheet piling of 4 ins. and 2½ ins. thickness. Other types involve relatively light-weight steel trench sheeting, concrete walling, and (occasionally) the use of bagged concrete built to form walls. The Board's policy on bank protection has been to concentrate on particular points where there is a risk of breaching or of the undermining of private property, and care has been taken to avoid any long "runs" of continuous work where such—though it may seem to give good "productivity"—is not strictly necessary. As a result, bank protection has been reduced by about 20 per cent. throughout the system (1964 in comparison with 1963). The total amount completed during the year was 19½ miles (24½ miles in 1963). The Board's concrete pilemaking workshops at Northwich, Crowle (near Keadby), Marsworth (near Tring), and Hillmorton (near Rugby), continue to manufacture requirements for concrete piles. Their total output (63,588 piles) was 14,028 less than 1963.

Lock Gates

75. With the completion of Woodnook Lock, King's Road Lock and Birkwood Lock on the Aire & Calder Navigation, the extensive programme of mechanisation of locks on the major waterways undertaken in recent years was largely completed. Work continued on the Caledonian Canal where five sets of gates at Corpach were mechanised during the year.

76. The renewal of life-expired lock gates continued throughout the system and a total of 57 pairs and 13 single gates were installed. This compared with figures of 43 and 22 in 1963. Renewals are kept to a minimum and are only undertaken when repairs would be uneconomic or no longer possible.

Culverts

77. The Board's waterways cross a very large number of culverts, many of which date from the original construction of the canal. Some are the

responsibility of the Board; others that of the local authorities. Some culverts were provided to continue original water courses under the canal. In other cases new culverts have since been constructed by local authorities under agreement and as part of the surface water drainage and sewerage schemes required by the general development of the area. All could, however, involve considerable expense in possible damage and flooding of property should they fail.

78. Because of their age and construction and the difficulty of detailed inspection in many cases, a considerable degree of engineering judgment has to be exercised in deciding which culverts ought to be reconstructed. During the year six culvert reconstructions were authorised at an approximate cost of £38,500—so the average cost of reconstruction was approximately £6,500. Of the six, five were on the Grand Union system and one on the Chesterfield Canal.

Emergency Work

79. No major breaches occurred in 1964. In April, contractors engaged on behalf of the local authority on the construction of a new sewer breached a culvert under the Grand Union Canal at Foxton, near Market Harborough. Water escaping through the culvert caused some flooding of nearby cottages but the flow was arrested before more serious damage occurred.

80. In July a minor slip occurred on an abutment of No. 4 Swing Bridge on the Knottingley and Goole Canal. Prompt action by local staff succeeded in containing the water until steel sheet piling could be driven, and delay to traffic was only a few hours.

81. In the second week of December, exceptionally heavy and continuous rainfall in Wales and the north-west of England caused extensive flood conditions throughout these parts of the country. On the Llangollen Canal, floodwaters from the River Dee entered the canal and emergency steps were taken to avoid danger to property in the length from Pentrefelin to Llantysilio. Flood waters caused damage also in the Newtown area and at other points on the Montgomery Branch. On the Upper Peak Forest Canal, damage was caused to an overflow channel leading to the Board's Todd Brook Reservoir, while on the Lower Peak Forest Canal the entry of floodwaters into the canal caused a breach near Hyde. Flooding incidents also occurred at a number of points throughout the north-west but overall damage fortunately proved relatively small. The Board wish to record the marked initiative and resource of their local maintenance staff of all grades, who worked very long hours in difficult conditions to combat the floods and minimise danger and damage.

82. The most serious unexpected difficulties, however, arose on the Caledonian Canal. This canal was closed for maintenance for a period of three months from 18th April to 20th July, 1964, in order to carry out the first major underwater repairs since 1939. Much necessary work was undertaken on the underwater masonry of lock walls and cills, quays and bridges, and substantial piling and other work was carried out on banks and weirs. The scale of underwater repairs required was found at certain places to be very extensive and the financial provision for maintenance work during the year had to be considerably exceeded.

83. Shortly after completion of the scheduled stoppage a further mishap occurred at the bottom double lock at Corpach, when a length of the south side lock wall collapsed. The canal had therefore to be closed again and the work of rebuilding was put in hand. A close examination of the remainder of the south wall and of the north wall confirmed that general deterioration of the masonry structure had taken place and that reconstruction was essential. This was a serious and unexpected setback but the work was put in hand and continued to the end of the year. Shipping again moved early in January, 1965.

Capital Works

84. Most of the major capital works undertaken by the Board during the year are referred to elsewhere, particularly in the Commercial chapter. In addition, the repairs to Pontcysyllte and Marple Aqueducts were successfully completed, as was the new pumping station, offering better control of water levels, at Gloucester Dock. Work on strengthening the River Trent weirs continued with extensive piling work on the apron and abutments at Sawley and Hazelford.

Relations with Other Authorities

85. It may not always be fully appreciated that there are very many ways indeed in which the work and interests of other authorities impinge on the inland waterways simply because of physical co-existence. A comprehensive review of these cross-relationships covering (for instance) requests for surface water discharges; laying of sewers, gas and water mains; installation of electricity cables, and other problems of wayleave and easement; questions arising from Water Orders, etc. would not be appropriate in this report. Three important fields, however, may be taken as illustrative. The first is mining; the second is road schemes; and the third is the piping and infilling of certain Scottish Canals.

(i) Mining

86. The Board's mining section was again active in investigating and advising on mining matters affecting the Board's interests. There was a steady programme of measuring and recording the position in areas of likely subsidence. Nine such investigations were carried out jointly with the National Coal Board and a further thirteen by the British Waterways Board alone. Negotiations were conducted with the National Coal Board, local authorities and others, on a variety of problems having a mining interest; a number of these arose from redevelopment proposals.

87. Of the 72 coal mines possibly affecting the Board's system, 22 caused subsidence affecting the Board during the year. In three cases, where substantial sums totalling in all £62,000 had been estimated as the total cost of remedial works, the National Coal Board elected to leave pillars of support and the need for remedial works was eliminated. An agreement was also reached with the National Coal Board whereby the British Waterways Board did not have to purchase support for the lock flight forming the remaining part of the Dearne and Dove Canal.

88. On the Leeds and Liverpool Canal the National Coal Board agreed to contribute to eight schemes of remedial work totalling about £35,000. Most of this expenditure will be incurred in 1965. Remedial works on

the Trent and Mersey Canal near Stoke-on-Trent went on during the year and approximately £7,000 of expenditure was incurred. The continuation of these schemes in 1965 is likely to require expenditure of about £30,500. There were no remedial works carried out during 1964 on the Board's system south of Birmingham although work is expected to develop on the Coventry Canal during 1965.

89. A number of important schemes affecting the Board's system have been studied. These include the likely effect on the Trent and Mersey Canal at Rugeley of projected workings over the next 25 years; the redevelopment of part of the Cromford Canal; the effect of future mining under the Ashby Canal and the likely effect of extracting an existing pillar of support under the Forth and Clyde Canal at Dullatur.

90. Work to deal with subsidence due to brine working continued during the year at five active sites and remedial works have included a contract for approximately £6,000 for the provision of steel piling to replace a collapsed concrete wall.

91. A feature of the year has been an increase in applications for planning approvals to work minerals in land adjoining the waterways. These have to be carefully studied to make sure that the waterways concerned will not be damaged. Active workings including those at nine opencast coal pits are regularly surveyed to check the support being left for the protection of the waterway.

(ii) *Road schemes*

92. The quickening tempo of construction of new roads, and of major improvements to trunk roads, has increasingly necessitated the study of proposed crossings of the waterways by the construction of new road bridges or the improvement of existing ones.

93. The cases of the north end of the Lancaster Canal and of the Walton Summit Branch (paragraph 18 above) were unusual in that a question of reducing navigational clearances arose. Even in the many cases where there is no such complication, a project for a road/canal crossing, or for road works adjacent to a canal, involves extensive and detailed discussion, extending over the whole period of planning and design, between the Board's engineers and the Ministry of Transport or their consulting engineers. When the stage of actual construction is reached, the Board's engineers are often concerned in the detailed arrangements for work on site. During 1964 there were discussions about proposed motorway crossings of the Board's waterways in Yorkshire, Cheshire, South Wales (Newport by-pass), the Birmingham, Nottingham and London areas. There were also many discussions with local highway authorities elsewhere.

94. The Board continued to take every opportunity to transfer to local highway authorities the responsibility for maintenance of road bridges crossing the waterways. The Board have only limited liabilities to maintain such bridges and these obligations are increasingly inappropriate to modern traffic conditions. The widening or other improvements of such bridges often provides a suitable opportunity to arrange for the local highway authority to assume full responsibility for their future maintenance; the Board welcome this as a logical and practical arrangement wherever the circumstances are appropriate.

(iii) Infilling of certain Scottish Canals

95. Discussions continued during the year with the City of Glasgow and Burgh of Coatbridge and substantial agreement was reached on terms for the piping of 2.2 miles of the Monkland and Forth and Clyde Canals within Glasgow and 1.1 miles of the Monkland Canal within Coatbridge.

96. In Glasgow the section concerned lies between Blackhill Locks and Pinkston Basin, where the site of the canal is required in connection with large-scale motorway and major road proposals planned within the City. In Coatbridge the length to be piped lies between Sheepford Locks and Coatbridge Cross and completion will permit extensive redevelopment to take place on land within the Burgh which is at present severed by the canal. In both cases work started during the year and the pipes will operate under pressure deriving from the head available at lock flights at the head of the piping schemes. The pipe lines will be of a capacity sufficient to meet the Board's requirements to move water along the system in connection with industrial abstractions and other supplies.

97. The Glasgow Corporation propose to pipe other lengths of the system in connection with further road schemes. This big extension gives rise to major questions such as the effect of long lengths of piping on temperature and pollution. All these matters are being discussed with the Corporation's consulting engineers.

The Engineering Survey

98. In addition to all the engineering work mentioned earlier, there has been commenced during the year by the Board's Engineering Department a comprehensive survey of the entire waterways system. The relevance of this survey to the formulation of policy has already been mentioned. In addition to that, it is of very great management importance. It will form a "Domesday Book" of the physical state of the waterways such as has not existed since the mid-nineteenth century. This work will form a sound and comprehensive basis of knowledge for future engineering management.

99. The survey is being carried out simultaneously in each of the seven engineering Areas and on the Scottish canals, the essential information being recorded on standard data sheets following a physical inspection of the waterway concerned by teams of engineering staff. Maps are also being prepared supporting the data sheets and the survey material is in each case drawn together in a series of summary reports.

CHAPTER IV

WATER

100. The Board's work is founded—though they trust not writ—in water. Chapter III has already referred to the effect of drought conditions and to the work on bank protection, culverting and piping. This chapter describes, first, the work that is going on to find out more about the potential of the Board's water resources; second, the position on sales of water; third, the effects on the Board of the coming into effect of the Water Resources Act; and fourth, the Board's conservancy function.

Hydrological Investigation

101. As the Interim Policy Report pointed out, the importance of water sales—mainly for industrial use but also to agriculture and public water supply authorities—has greatly increased in recent years. Water sales are described in paragraphs 105–107 below. Knowledge of quantities arising from the various sources (reservoirs, streams, feeders, and other intakes) has become of increasing importance in drawing up an assessment of supplies available on particular canals, bringing into account the various uses for which the water is required and what may be available for additional sales.

102. Similar knowledge of water resources will also be needed for the provision of information likely to be required under the Water Resources Act, particularly for the assessment of minimum flow requirements to meet the various needs involved in operating the inland waterways system. Work therefore continued throughout the year on surveying the Board's water resources both at the Board's own reservoirs and also at points of intake from feeders and streams discharging into the canal system. The Board's technical staff engaged on this work was strengthened during the year.

103. Further gauges or other measuring devices were installed at reservoirs, where the records being built up are enabling a general study to be made of their yields and extent of use. It is already known, for example, that whereas some reservoirs are used to the maximum of their capacity others have a margin over present demand. The Board's reservoirs are subject to statutory inspection in accordance with the Reservoirs (Safety Provisions) Act 1930, and a number were so inspected during the year. In a few cases minor works to spillway channels, etc., were required by the Inspecting Engineer and these were put in hand.

104. Progress was also made with the installation of measuring devices at points of intake into the canal system from feeders and streams. Much more remains to be done, but the flow of information being built up will be of increasing assistance in calculating the relationship of supply to demand in any given area and the minimum flow requirements at key points to provide for the requirements of the system. Work also continued during the year on the provision of new weirs and spillway channels to reduce the dependence on manually operated flood paddles in the control of flood

waters entering the system, and a further four were completed during the year, the average cost being £2,500.

Sale of Water

105. The sale of water has grown progressively in importance and it has been recognised by the Transport Act 1962, as one of the Board's activities. It is, indeed, one of their main activities. By far the larger part of the Board's "water sale" business consists of sale of water for use and return by industrial undertakings. The annual quantity of water, therefore, which is actually used by the firms which the Board's waterways supply, is very large indeed.

106. Paragraph 27 of the Board's Report for 1963 recorded an increase of £21,079 in the receipts from this source compared with the previous year. Although during 1964 there was some appreciable loss of revenue resulting from reduced supplies taken by Power Stations and by British Railways (following the increasing use of diesel engines) and also from variations in industrial demands, receipts from the sale of water on all the Board's waterways nevertheless amounted to £688,070, showing a further improvement of £79,013 over the year 1963. The increase in revenue is in the main accounted for by greater quantities abstracted by the Bristol Waterworks Company at Purton on the Gloucester and Sharpness Canal, increased consumption by Pilkington Brothers Ltd. at Long Sandall on the Sheffield and South Yorkshire Navigation, by the North British Rubber Company Ltd. from the Union Canal at Edinburgh, Cable Street Mills Ltd. at Wolverhampton from the Birmingham Canals, Renishaw Iron Company Ltd. near Sheffield from the Chesterfield Canal, and R. Fletcher and Sons Ltd. at Kearsley on the Manchester, Bolton and Bury Canal. The total revenue of £688,070 does however contain a significant amount of retrospective payments which were a feature of some of the more important new agreements; to this extent, it overstates the 1964 revenue as a "base-line" for 1965.

107. Negotiations have taken place during the year with the Huddersfield Corporation about a proposal by the Corporation for the supply of surplus water from the Huddersfield Narrow Canal's resources towards meeting the expected growth of demand on the public water supply system administered by the Corporation. The Corporation have prepared a scheme for the construction of a new reservoir in the Scammonden Valley and propose to feed into this reservoir, via a tunnel and a system of catchwaters, water arising from gathering grounds in the adjoining Colne Valley. These catchwaters will enable supplies to be abstracted from streams which at present convey water from the Board's March Haigh, Redbrook and Swellands reservoirs to the canal. In addition the yield of the gathering ground to the Board's Tunnel End reservoir will be reduced. The negotiations have been directed to securing satisfactory financial terms for the use of supplies to which the Board are entitled, and these are now in an advanced stage. To obtain the necessary powers the Corporation have promoted a Bill in Parliament covering the construction of the reservoir and of the related work on the tunnel and system of catchwaters. The Bill also contains certain provisions as to compensation water and other matters affecting the Board's interests. Pending conclusion of the negotiations

with the Corporation, and in order to safeguard their own position, the Board have felt obliged to lodge a Petition against the Corporation's Bill.

Water Resources Act 1963

108. 1964 has been a year of intensive preparation by the Board (as it has been for all concerned with water administration) for the important changes which will come into effect in 1965 under the Water Resources Act 1963. It is unnecessary here to summarise the general effect of that Act: a general commentary on its implications for the Board was given in the Interim Policy Report. The full import of all its provisions will inevitably emerge only over a period of time. Moreover, at the end of the year under review some important decisions were still to be made by Ministers in settling the terms of the Orders to be made under the Act. Nevertheless it is now possible to record some developments which are of special interest to the Board and to outline the task ahead.

109. The Water Resources Board was set up on 1st July, 1964. The Board are not represented on this central authority.

110. The River Authorities were set up on 15th October, 1964, their constitutions having been defined by a series of Orders made earlier in the year. The Board were consulted by the Minister of Transport about appointments to four of the authorities, to which the Minister subsequently appointed the following officers of the Board: Mr. C. Lofthouse (Regional Engineer, Northern Region) to the Trent River Authority and the Yorkshire Ouse and Hull River Authority; Mr. C. M. Marsh (Special Engineering Adviser) to the Mersey and Weaver River Authority; and Mr. F. G. B. Clayton (Regional Engineer, Southern Region) to the Severn River Authority.

111. The Water Resources Act introduces, for the first time, a comprehensive system for recording and controlling the abstraction of water from rivers and other sources of supply. From 1st April, 1965, existing abstractors will be able to obtain as of right, licences from the new river authorities broadly to continue as before, but proposals for new or increased abstractions will be published and open to objection before the grant of a licence is considered. The Board are in a unique position in this matter, having in their ownership or control an extensive system of waterways, from which they are empowered to sell water as a recognised part of their business. Furthermore, it was made clear in the Transport Act 1962, that sources of supply granted to the Board's predecessors for replenishing their waterways may be resorted to for obtaining water for the purposes of sale, as well as for the original and at one time very substantial requirements of navigation. The revenue from this source makes a vital contribution to the upkeep of the system.

112. Most of the water sold is not abstracted by the Board, but by the purchasers by permission of the Board. Under the general provisions of the Water Resources Act the purchasers, as the actual abstractors, would have acquired the right to hold the abstraction licences and in due course the contribution received by the Board from this important source towards the upkeep of the waterways would have come to an end. Special provisions were, however, made in the Act whereby the Board alone can hold licences for water supplies which they have sold in the past and for any new ones for which licences may be granted in the future.

113. These special arrangements do not extend to the whole of the system. Some of the Board's waterways consisting of natural rivers, are to be excluded from the special provisions by an Order made by Ministers under the Act and some revenue from this source must be lost. This naturally affects the Board's general financial position though it may ultimately be replaced in another form as will be explained later. The making of the Order which will determine the immediate loss of revenue to the Board was still awaited at the end of the year.

114. Much thought also had to be given to preparing for the enormous task of obtaining licences for the very large number of supplies to which the special provisions will apply. The Board were consulted on the draft of procedural regulations to be made under the Act and numerous points were raised. A request has been made for a special form of licence application for a licence of right appropriate to the exceptional circumstances to be prescribed for use by the Board, thus avoiding any unnecessary diversion of effort of the Board's staff and those of the river authorities in dealing with these special cases.

115. The River Lee Catchment Area is not comprised in a river authority area so that most of the provisions in the Water Resources Act have no automatic application in that area. But Ministers are empowered to make an Order conferring on the Lee Conservancy Catchment Board functions similar to those of the river authorities. The Board were consulted about the proposed provisions of this order, but it had not been made at the end of the year. It is of great importance to the Board to preserve their revenues in respect of the Lee Navigation and particularly the statutory provisions under which they have received annual payments from the Metropolitan Water Board in respect of conservation services performed by the Board. An application has been made to Ministers for an Order raising the annual payment to £50,000 from 25th March, 1964, on account of increased costs.

Conservancy Functions Performed by the Board

116. It is sometimes overlooked that, by their system of reservoirs, and the provision and maintenance of weirs and locks which check the natural run off of many rivers, navigation authorities such as the Board have been water conservators on a large scale for many years and that the community have derived benefits not confined to navigation. This work has to some extent fulfilled in advance the new function of conservation which is now conferred on the river authorities. But whereas the latter will be able to ensure financial viability in this sphere of their activities by levying charges on abstractors who hitherto have been able to rely on riparian or statutory rights, the Board have not been able to do so.

117. To some extent conservation by the Board is rewarded by the proceeds of direct water sales, but, particularly on the waterways to be excluded from the special provisions of the Water Resources Act and on the included waterways in cases where water has been taken without payment under claims of right, the Board have to look for indirect contributions to help them in their struggle towards viability. In the Water Resources Act these problems receive some statutory recognition for the first time.

118. Section 91 of the Water Resources Act makes it possible for the Board and other navigation authorities to claim a financial recognition of their water conservation services in the form of payments by the river authority where these services have contributed to the fulfilment of the general function of water conservation shortly to be assumed by the river authorities.

119. Section 131 provides for the Board to receive a proportion of the charges which will be payable to the river authority in those cases where free supplies have been taken from the Board's waterways to which the section applies. This is a start towards remedying an inequitable situation, but it will be some time before such charges become payable and even when they do they may not bear a proportion for the Board which could be regarded as an adequate contribution to the upkeep of an artificial waterway. The Board accordingly look to future waterways legislation to deal more completely with this and other problems and welcome the Government statement made during the progress of the Water Resources Bill that its provisions were without prejudice to the prospective legislation for waterways.

deficit of £99,396 for the year, this was after contributing £108,952 to the upkeep of the waterways by way of tolls.

127. Departmental administration included in the working expenses of the principal activities amounted, in total, to approximately £711,000, or £16,000 more than in 1963. There was a general increase in salaries to be absorbed. Moreover it was not to be expected that economies arising from the re-organisation referred to in Chapter VI, paragraphs 148-153, would be realised in 1964. There was a quite considerable expenditure incidental to the re-organisation, including the expenses of moving offices and staff, some of which will continue into 1965.

128. The allocation of departmental administration between the main activities was re-examined and adjusted to reflect the actual burden of work as accurately as possible and in particular to take account of the changes in responsibilities and costs resulting from the re-organisation. The effect has been that the charges against the Waterways and Fleets were reduced, and those against the other activities were increased.

(b) Central Charges

129. The main heads of central charges are shown in Appendix IV Statement D.2. The largest element is the cost of central administration, which increased by £6,576. This increase is a reflection of the change from a divisional to a functional organisation and does not represent a general growth in "administration". The other heads of central charges showed only minor variations as against 1963.

(c) Provision for Internal Insurance

130. As in 1963, the Board have charged Revenue Account with £25,000 as a further provision against major payments and losses arising from fire and accidents. The purpose of this provision against which nothing has yet been charged is explained in paragraph 30 of the Notes on Accounts at Appendix IV, Statement C.

(d) Interest

131. Interest charges increased by £52,966 to £826,533 for the year. Details of these charges are shown in Appendix IV Statement D.3.

132. By far the largest element is interest on the commencing capital debt to the Minister of Transport, which amounts to £19.2 million and upon which the annual interest is £725,835. This debt arises from the provisions of Section 39 of the Transport Act 1962, and represents the net book value of the assets, less liabilities, transferred to the Board at 1st January, 1963, from the books of the British Transport Commission. It does not derive from an assessment of the net earning power of the waterways and other assets vested in the Board. The Board discussed this debt at some length in paragraphs 93 to 103 of their Annual Report for 1963, when they explained that, after reviewing the vested net assets and having regard inter alia to the potential liabilities to which many of the waterways are subject and which far exceed their revenue earning capacity, the maximum value which they could provisionally attribute to them was £11.6 million. This was not, however, to be a final figure; it will be adjusted if further investigations indicate that an adjustment is necessary.

133. The difference between the commencing capital debt—the “inherited” value of the net assets which the Board took over—and the £11·6 million attributed to them by the Board—viz.: £7·6 million—was transferred to Capital Deficit Account. Profits or losses on the disposal of vested assets are being transferred to this account as they arise. At 31st December, 1964, the balance on Capital Deficit Account was £7,728,436 which, therefore, provisionally represents the minimum by which the Board regard the commencing capital debt as excessive in relation to the value of the net assets, less liabilities, to which it is related. Interest on this deficit amounts to almost £300,000 per annum and is a continuing burden on the Board's revenue account. Even this is not the end of the interest problem, for some of the “vested net assets” are (with the statutory liabilities adhering to them) in reality “vested net liabilities”. As the Board stated in their 1963 Annual Report, they may wish later on to put forward proposals as to how the problem of the interest might be resolved.

Balance Sheet

134. The Board's balance sheet at 31st December, 1964, shows the following position (Statement A.2):—

	£000	£000	More (+) or less (—) than at 31st December, 1963	
			£000	£000
Fixed assets	13,725·4		+ 690·7	
Less: Depreciation on craft, plant and equip- ment	490·8		+ 238·1	
		13,234·6		+ 452·6
Current assets	2,161·6		+ 167·5	
Less: Current liabilities and provisions ...	2,969·8		+ 197·7	
		808·2		— 30·2
Net assets		12,426·4		+ 422·4
These net assets were represented by Com- mencing capital debt	19,252·9		—	
Loans from Minister of Transport	725·0		+ 425·0	
		19,977·9		+ 425·0
Capital liability to Nottingham Corporation (under 5th schedule Transport Act 1962)		79·9		— 11·7
Superannuation Fund deposit		177·0		+ 8·4
		20,234·8		+ 421·7
which exceeded the book value of the net assets by the following amounts:—				
Revenue deficits, 1963 and 1964	3,066·9			
Less: Grants from Minister of Transport ...	2,986·9			
	80·0		— 17·0	
Capital deficit	7,728·4		+ 16·3	
		7,808·4		+ 7
		12,426·4		+ 422·4

135. Capital expenditure in 1964 on fixed assets was £784,086 of which £545,179 was in respect of land and buildings, waterways, docks and other works and the remainder (£238,907) was for craft, plant and equipment. Expenditure on the new warehouses at Knostrop, Rotherham and Brentford

amounted to approximately £123,000 during the year, and capital expenditure on new bank protection in its various forms amounted to £249,828—of which £140,580 was spent on the major transport waterways. The development at Corpach on the Caledonian Canal cost £75,948 during the year. As in 1963 the expenditure on craft, plant and equipment was largely in respect of replacements; freight carrying boats accounted for £90,599 of this total.

136. There were off-sets (totalling £93,410) to the capital expenditure of £784,086 referred to in the previous paragraph. The book value of land and buildings sold amounted to £21,436 and £11,126 was written off in respect of displacements (£5,645) and amortisation of leaseholds and temporary buildings (£5,481). Together these amount to £32,562, but the transfer of assets from operational to non-operational land and buildings at current values reduced this to £8,514. The balance of £84,896 is made up of craft, plant and machinery taken out of service during the year, £53,406, and a further provision of £31,490 for losses on the disposal of surplus carrying craft (in this instance craft from the former North Western fleets).

137. The book value of the fixed assets was reduced by an increase of £238,133 in the amount provided for depreciation.

138. Turning to current assets, the main sources of variations were these. Stocks of stores and materials were again carefully scrutinised and further reduced by £26,927. Trade debtors and rents receivable increased by £130,582, of which about £90,000 was in respect of retrospective arrangements for water abstractions completed at the end of the year or early in 1965 and increases in metered consumption, and £40,000 was mainly in respect of a few large trading debts settled early in the new year. Other debtors rose by £53,071, of which £36,000 was recoverable income tax.

139. Current liabilities and provisions increased by £197,716. Trade creditors accounted for £127,545 of this, the principal factors being approximately £50,000 due to contractors for works on the Caledonian Canal and about £50,000 in respect of a few large amounts paid in January, 1965, instead of at the end of the year, as happened in 1963. Temporary bank borrowings were £36,839 higher and other creditors increased by £15,472, including retrospective salary and wage awards agreed after the year end. There was a further provision of £25,000 for internal insurance.

140. Capital Deficit Account was increased by a net loss of £16,316 sustained on the disposal of vested fixed assets, including the provision for losses on disposal of surplus craft referred to in paragraph 136.

141. The year 1964 was an active one for disposal of craft and of engineering plant. As far as engineering plant was concerned it had become apparent that with the changing pattern of work (as evidenced, for instance, by the considerable cut in the labour force in recent years) there was a good deal of engineering equipment of various kinds which was not being used enough to warrant its being kept, stored, and maintained. Schedules of insufficiently used equipment were drawn up and the equipment was earmarked for disposal. The Board received valuable assistance from the Ministry of Defence Sales Directorate in arranging public auctions on these surpluses. The actual sales had not all taken place by the end of

the year under review. The Board are convinced that the clearing away of under-used equipment will help to increase efficiency.

142. The Board also reviewed their holding of craft of various kinds. The need to make this review arose particularly from the ending of the Board's own carrying activities in the south-east and north-west. Tenders for a number of surplus boats were invited, either on the basis of outright purchase or on the basis of hire arrangements. As a result of this operation 34 boats were disposed of (all on terms of either immediate or deferred purchase). The operation as a whole will show a loss on book values of £33,135, but provisions already made in anticipation of this loss amounted to £40,839 and £7,704 will remain to be written back as a book profit on the immediate transaction. The effect of these arrangements will, of course, be that the boats, instead of lying idle and requiring maintenance, will be put to use. The financial aspects of the transaction had not been completed by the end of the year under review.

143. The treatment accorded to capital expenditure and receipts is set out in Appendix IV, Statement C.

Investment

144. This is broadly made up of the capital expenditure referred to in paragraph 135 above together with expenditure on certain major renewals of structures charged to revenue account. The total of £1.1 million was slightly less than the amount provided for in some earlier forecasts. It was financed as follows:—

	£M
Depreciation and major renewals charged to revenue account	·6
Sale of fixed assets	·1
Loans from Minister of Transport	·4
	<hr/>
	£1.1 million

Financial Objective

145. Section 23(4) of the Transport Act 1962, requires the Board during the five years from vesting date (1st January, 1963) so to conduct their business as to keep deficits incurred on their revenue account at the lowest possible level. This is their immediate financial duty. That the Board have not been unsuccessful is evidenced by their having kept the deficit at almost the same figure as for 1963 despite the increased costs referred to in Chapter I.

146. The Board will, of course, continue to seek ways of improving their financial position. They have never minimized the many difficult problems associated with making further reductions in expenditure. The problem is inextricably involved in the whole question of future general policy.

CHAPTER VI

STAFF AND ORGANISATION

Staff Numbers

147. The number of employees of the Board in all grades at 1st January, 1964, was 3,818. At the end of the year it was 3,509. This reduction of 309 followed a reduction of 524 between 1st January and 31st December, 1963. It arose principally on the maintenance side (wages grades) but there was also a considerable reduction (84) in the Administrative, Technical and Clerical grades. The reduction in the maintenance grades was due to the combination of the expenditure curtailment and economy drive begun by the Board in their first year and to the cessation of the Board's narrow boat activities. The reduction in the Clerical and Administrative grades followed the reorganisation of the management structure which was announced in November, 1963.

Organisation

148. The former management organisation of four separate geographical managements ceased to operate in March and the functional organisation previously announced was instituted.

149. Under the Chief Engineer, two Regional engineering maintenance organisations were set up—one for the north (based on Leeds) and one for the south (based on Gloucester). At the same time area engineering offices were set up in Wigan, Castleford, Northwich and Nottingham in the Northern Region and at Birmingham, Gloucester, and London in the Southern Region. Each area was placed in charge of an Area Engineer responsible to the Regional Engineer. The former District Offices were abolished—Section Inspectors reporting direct to their Area Engineer. In Scotland all canals except the Caledonian are being grouped under a single Engineer in Charge.

150. In the Commercial Department the promotion of all forms of commercial transport and pleasure craft revenue-earning activity was brought under national direction and control, whilst greater autonomy was granted to the managers of depots, fleets and docks, each under direct supervision from Headquarters. Responsibility for operation of the "track" passed entirely to the Engineering Department.

151. Estate Offices were established at Gloucester and Watford. A third office (to deal with the northern region and situated at Leeds) was in course of establishment at the end of the year.

152. Good progress was made in the centralisation of the Accounts and Supplies departments. Data processing through punched cards was introduced and work is progressing in transferring all accounting processes to this system.

153. The Legal Department and the Audit and Public Relations Sections all remained centrally directed and the Staff and Management Services functions were brought under central control.

Security Force : Canals in London Area

154. Following the decision to dispense with the services of the British Transport Police recruitment of Security Officers was put in hand. When a reasonably-sized force had been built up, the British Transport Police (whose help in the interim period is much appreciated by the Board) withdrew in May, 1964.

155. The new force has played an important part in combating larceny on the canals and also in preventing hooliganism and other matters. The problem of larceny and vandalism remains however of great concern to the Board.

Industrial Relations

Machinery of Negotiation

156. The titles of the two industrial Joint Councils were changed to :

- (i) The National Joint Council for British Waterways Salaried Staff.
- (ii) The National Joint Council for British Waterways Wages Grades.

The change of title and amendments to the constitutions were made necessary by the revised organisation of the Board and, in the case of the National Joint Council for Wages Grades, by the withdrawal from the Council of the independent carriers.

Salaried Staff

157 (i). Improved salaries were agreed to operate from 27th January :

(ii) A redundancy agreement was concluded to operate from the 1st March :

(iii) A further claim for a substantial increase was being negotiated at the end of the year.

Wages Grades

158 (i). Agreement on basic wage rates had been reached at the very end of 1963. During 1964, claims were received for :—

- (a) A substantial increase in basic wage rates :
- (b) A reduction in the working week to 40 hours in five days—Monday to Friday :
- (c) An increase in annual leave entitlement to three weeks, and
- (d) Holiday pay to be geared to the principle of average weekly earnings.

These claims were all being negotiated on at the end of the year.

(ii) A strike of engineering tradesmen at Northwich which began on 20th January was settled and work resumed on 11th March.

(iii) Arrangements were concluded for the deduction of Trade Union contributions through the payrolls.

(iv) Agreements for payments for redundancy and for a disciplinary procedure were concluded.

(v) An agreement was made providing for a four-hour minimum payment to staff called out to work outside normal hours.

Contracts of Employment Act 1963

159. Steps were taken during the year to implement the provisions of the Contracts of Employment Act 1963. This has involved giving members of the staff a statement setting out those terms and conditions specified in the Act. Advantage has been taken of the provision in the Act permitting statements to refer employees to a document or documents setting out one or more of the conditions. Three main documents have been prepared in booklet form covering the wages, classified salaried and senior staffs. These documents bring together all standard terms and conditions. In the case of the wages grades documents, supplements have also been drawn up covering approved conditions which have a limited local application.

Pensions

Legislation

160. The most important item of legislation affecting the pensions position of British Waterways employees was the British Transport Reorganisation (Pensions of Employees) (No. 1) Order 1964 (S.I. 1964 No. 1329). This Order was made by the Minister under Section 74 of the Transport Act 1962 after consultations with British Waterways and other Transport Boards. Briefly the Order provides for staff of the nationalised transport bodies who move from one such body to another to continue in membership of their pension schemes. Until the Order was made it was necessary for staff moving from one Board to another to be technically regarded as seconded in order to preserve their pension position.

Reciprocal Pension Arrangements

161. Reciprocal arrangements for the preservation of pension rights were concluded with the Transport Salaried Staffs' Association. Although such an arrangement has been agreed in principle with the Electricity Council the formal arrangements are not yet concluded.

Training and Education

162. During the year numerous internal and external courses were held on such subjects as Management, Job Safety, Work Study, Organisation and Methods, Welding, Hydrology and Mining.

163. Facilities have been provided for overseas students from Canada, U.S.A., Nigeria, and Pakistan to spend some time with the Board's organisation.

CHAPTER VII

OTHER ACTIVITIES

Co-operation with Voluntary Societies

164. The consultations with voluntary societies are leading to practical co-operation between the Board and these Societies in appropriate cases.

165. The Board is most appreciative of the work being done by the Societies and they also wish to acknowledge the farsighted and imaginative co-operation of the Trade Unions in the matter of using voluntary labour in canal restoration schemes. Schemes of this kind are of value in enabling work to be put in hand which otherwise could not have been contemplated by the Board at the present time.

166. A scheme of practical restoration work has been undertaken in conjunction with the Staffordshire and Worcestershire Canal Society. The object of the scheme is to restore to navigability, at minimum pleasure craft standards, the 16 locks on the Stourbridge Canal which is one of the routes from the Birmingham area to the Staffordshire and Worcestershire Canal and the River Severn. The purpose of the scheme is to stimulate pleasure craft usage and to test the potential of the route. The Board are working with the Society and besides carrying out essential lock gate renewal work are assisting generally with plant and equipment required. Good progress has been made and it is planned to renew a number of defective lock gates early in 1965.

167. On the Chesterfield Canal also an agreed scheme of work has been carried through in co-operation with the Retford and Worksop (Chesterfield Canal) Boat Club, whose members have assisted by forming weekend working parties for lock clearance and general maintenance work. Much useful work has been done and the Board's own staff have worked with the volunteers in this joint scheme.

168. In other cases discussions have been taking place with interested Societies to explore the possibilities of similar schemes of voluntary work being carried out.

169. A Joint Working Party of representatives of the Kennet and Avon Trust and the Board was established to investigate on the site the work requiring to be done to restore certain lengths of the canal at both the eastern and western ends to a standard suitable for pleasure craft. At the eastern end the length covered by the survey was from Reading to Hungerford, much of this length consisting of the canalised River Kennet. At the western end the survey covered from Bath Locks to Dundas Basin, with some consideration at the Trust's request, of the further length to Bradford-on-Avon. This included the length between Limpley Stoke and Avoncliff Aqueduct which is at present dewatered.

170. The working party reported on the extent and cost of work necessary for restoration, thus providing an agreed factual basis for further discussion with the Trust.

171. On the length between Dundas and Avoncliff Aqueduct one of the working party's observations was that, to dispel any doubt as to the extent of the leakage problem in the Limpley Stoke area as a result of fissures in the ground underlying the canal, an experimental refilling of the dewatered length should be considered. The Board are arranging for this to be done with the assistance of the Trust during the spring of 1965. Volunteer work has included certain preparatory work in clearing the bed in readiness for the experiment.

172. Apart from the scheme of restoration arising from the joint working party's inspection, the Trust put forward proposals for the rebuilding of Sulhampstead Lock on the eastern section which formed the first impassable lock for craft moving westwards from the Reading area. The intention is that the Trust should carry out a reconstruction of the lock to a simplified design suggested by the Board, employing volunteer and other labour available to them. Good progress was made during the year with the arrangements for a start on the scheme.

Lee Valley Regional Park

173. At a Conference of the local authorities and other bodies concerned, held on 20th July, 1964, and opened by H.R.H. The Duke of Edinburgh, the Civic Trust presented their report on "A Lee Valley Regional Park". The Report, which was undertaken by the Trust on behalf of the riparian local authorities, examines the scope for developing the area for the benefit and enjoyment of the public. As the navigation authority, the Board were consulted by the Trust in the preparation of the Report and assisted the Trust with information and advice.

174. It will be essential to ensure that the development of the area for recreation and leisure proceeds in a way that does not create difficulty for the commercial traffics (which it is the Board's duty to assist and stimulate) or danger for pleasure craft, and that opportunities to maintain and increase the Board's revenue are not foregone. Subject to these considerations the Board have made clear that they will do all they can to assist in the implementation of the Report in conjunction with the other interests involved. They have been in close consultation with the Association of Master Lightermen & Barge Owners on these matters.

Directions by Minister of Transport

175. In accordance with Section 27(8) of the Transport Act 1962 certain directions issued to the Board by the Minister are set out in Appendix IV Section H.

The Board's Powers of Construction, Manufacture and Production

176. In accordance with Section 13(4) of the Transport Act 1962, the Board submitted, and the Minister of Transport approved, proposals as to the manner in which their powers of construction, manufacture and production were to be exercised. The manufacturing activities which the Board proposed to undertake themselves included mainly the construction of lock gates, sluices and similar equipment; the production of concrete piles for bank protection; and the building of small craft for their own maintenance purposes and the conversion for their own purposes of any craft capable of using their waterways from power to dumb or vice versa, and the

shortening or lengthening of craft and the installation in craft belonging to them of specialised engineering equipment purchased from outside sources (in accordance with the powers in Section 13(1)(a) of the Act as modified by Section 13(7)). The Board have under consideration the question whether—in order to utilise fully the new workshop at Goole—they should now seek the Minister's approval to an additional proposal under Section 13(4) of the Act, namely, that they should manufacture a certain number of compartment boats in their workshop.

Revision of General Canal Byelaws

177. In their last report (paragraphs 152–154) the Board referred to the revision which they had undertaken of the present Code of General Canal Byelaws for England and Wales. During the year discussions continued with the various bodies and organisations concerned with a view to finalising the draft for submission to the Minister of Transport. The draft was still under discussion at the end of the year, but public notice has since been given of the Board's intention to apply to the Minister for confirmation of the Byelaws. Some objections have been received.

Waterways Museum, Stoke Bruerne

178. The total number of visitors in 1964 was 16,600. To the north of the Museum building an area of land was levelled to receive outdoor exhibits. A nearby lock was converted into a dry dock to take an old weighbridge, formerly at Cardiff, and the butty boat "Northwich". The car park was enlarged to permit its increasing use by coaches, and additional moorings have been provided for waterborne visitors.

Closed Canals on which Elimination was in Progress

179. Redevelopment works authorised by the British Transport Commission Act 1961 continued during the year on the Worsborough and Elsecar Branches of the Dearne and Dove Canal—some 4½ miles being dealt with. The works included the conversion of 2 miles of broad canal to narrow open water channel, the cascading and demolishing of 6 locks, the construction of a large steel piled dam at Swinton and considerable drainage works. A length of ½ mile on the Worsborough Branch became vested in the West Riding County Council and a further 4 miles will shortly vest in the National Coal Board. A small section is being taken over by the Wombwell Urban District Council to whom 7 highway bridges have already been transferred.

180. Negotiations in respect of the last remaining section—some 800 yards in length—of the Oldbury Old Canal resulted in agreement for transfer to the Oldbury Corporation who will carry out culverting works and deal with the necessary drainage. Three highway bridges will also be transferred.

181. Of the 7¼ miles of the Wyrley and Essington Canal (Ogley Locks Section) closed under the British Transport Commission Act 1954, one mile has already been disposed of and negotiations are in hand for the transfer of further sections to adjoining land owners and local authorities. On the Sneyd Branch arrangements for transfer of one section have been concluded and negotiations with other land owners are in hand.