



Comptroller and Auditor General

Report on Value for Money Examination

Department of the Marine

Management of Inland Fisheries

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Report of the Comptroller and Auditor General

Management of Inland Fisheries

I have, in accordance with the provisions of Section 9 of the Comptroller and Auditor General (Amendment) Act, 1993, carried out a value for money examination of the management of Inland Fisheries by the Department of the Marine and the Central and Regional Fisheries Boards.

I hereby submit my report of the above examination for presentation to Dáil Éireann pursuant to Section 11 of the said Act.

A handwritten signature in black ink, appearing to be 'John Purcell', with a large, stylized loop at the end.

John Purcell
Comptroller and Auditor General

11 July 1997

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Abbreviations

CFB	Central Fisheries Board
EPA	Environmental Protection Agency
ERDF	European Regional Development Fund
ERFB	Eastern Regional Fisheries Board
ESRI	Economic and Social Research Institute
NRFB	Northern Regional Fisheries Board
NWRFB	North Western Regional Fisheries Board
REPS	Rural Environment Protection Scheme
RFB	Regional Fisheries Board
RIB	Rigid Inflatable Boat
ShRFB	Shannon Regional Fisheries Board
SRFB	Southern Regional Fisheries Board
SWRFB	South Western Regional Fisheries Board
TAM	Tourism Angling Measure
WRFB	Western Regional Fisheries Board

Summary of Findings

The freshwater lakes comprise approximately 357,000 acres and there are about 8,600 miles of main channel rivers. Many species of fish inhabit these waters, including salmon, sea trout, brown trout, pike, eels and bream.

Inland fisheries management is concerned with all of these freshwater resources and also with certain activities at sea, including commercial fishing and sea angling

The Department of the Marine (the Department) has ultimate responsibility for ensuring that fisheries are managed for the maximum national benefit. The Central Fisheries Board (CFB) has primary responsibility for the overall co-ordination and, where necessary, direction of the activities of the seven Regional Fisheries Boards (RFBs) and it also provides specialist services to the RFBs

The RFBs have responsibilities with regard to the management, conservation, protection, development and improvement of the fisheries within their regions and offshore to the twelve mile limit for the protection of salmon.

Total expenditure by the CFB and the RFBs amounted to £12.8m in 1995. Four fifths of the funding required came from the Exchequer and from the European Union and the balance was provided from their own resources.

The purpose of the value for money examination was to assess the adequacy of the management of inland fisheries. The examination focused on

- overall management of inland fisheries
- management of specific fishing products
- management of fisheries protection
- management of water quality

Overall Management

In the course of the examination there was abundant evidence of the dedicated approach of those involved in the management of inland fisheries. However, the quality of planning was found to be poor at all levels. Despite legal obligations on all Fisheries Boards to prepare five-year development programmes, the CFB did not have a programme and neither did four of the seven RFBs.

The roles of the various organisations involved - the Department, the CFB and the RFBs - need to be redefined to achieve much needed clarity of purpose.

Recommendations to resolve organisational and management deficiencies were contained in two independent studies completed in 1994 and 1996. However, most of the recommendations contained in these studies have not yet been implemented.

In addition, it was noted that

- No agency appears to have responsibility for the overseas promotion of angling, with the result that little promotion is carried out.
- Substantial funds for angling development are available under the Tourism Operational Programme, 1994-1999. However, levels of activity and spending are substantially behind target and there is some doubt as to whether the allocated funds will be spent by the end of the Programme.

Management of Specific Fishing Products

Some 152,000 overseas visitors participated in angling in Ireland in 1995 spending an estimated £53m. There are also some 190,000 domestic anglers who spent £27m approximately on fishing activities in 1996.

The products included in inland fisheries management are coarse fishing, game fishing and sea angling. An analysis showed that the allocation of resources by the Fisheries Boards to these products did not correspond to their relative economic and social importance, in terms of expenditure by overseas visitors and participation by Irish residents.

Targets and a marketing focus were lacking for all three fishing products and there was considerable potential for the development of sea angling and, in particular, eel fishing.

Management of Fisheries Protection

All of the RFBs were active in issuing prosecutions and in seizing illegal nets. In the period 1991-1995 the RFBs, on average each year, initiated 330 prosecutions and seized over 90,000 yards of nets. The use of patrol boats by Boards for protection work varied across the regions.

Important changes have been introduced by the Department with a view to increasing the efficiency of fisheries protection. These include

- the appointment of a full time national protection co-ordinator, based in the CFB
- allowing the use of monofilament nets
- significantly reducing the sea area which may be commercially fished and restricting the permitted periods for commercial fishing.

Management of Water Quality

Fisheries Boards have a statutory duty to protect fisheries' habitats. Good water quality is required for fish survival and particularly high quality water is required for game fish. The RFBs have powers to monitor water quality and to prosecute polluters and must receive notice at the planning stage of many proposed developments.

The amount of seriously polluted waters has declined in recent years but the amounts of moderately polluted and slightly polluted waters have increased.

There were over 50 fish kills on average each year in the period 1991-1995. During the same period the RFBs initiated an annual average of 77 prosecutions.

Significant duplication was found between the activities of the RFBs and the local authorities in the following areas

- carrying out investigations / inspections
- issuing advice / warnings
- initiating prosecutions
- monitoring water quality.

A co-ordinated approach involving all of the relevant public bodies will be required to eliminate the inefficiencies and to overcome the problem of pollution in Irish lakes, rivers and streams.

Management of Inland Fisheries

Part 1: Introduction

- 1.1 The freshwater lakes comprise approximately 357,000 acres, roughly equivalent to one fiftieth of the total area of the State, and there are about 8,600 miles of main channel rivers. Many species of fish inhabit these waters, including salmon, sea trout, brown trout, pike, eels and bream.
- 1.2 Inland fisheries management is concerned with all of these freshwater resources. In addition, inland fisheries management is concerned with certain activities at sea, including
 - commercial fishing for salmon and sea trout
 - sea angling, i.e. fishing with rod and line from the shore or from boats.
- 1.3 The Department of the Marine (the Department) has ultimate responsibility for ensuring that fisheries are managed for the maximum national benefit. The Inland Fisheries Division of the Department, which has nine staff, discharges its responsibilities through
 - policy development
 - legislation, including secondary legislation
 - the provision of resources, including finance and staffing
 - guiding and monitoring the Fisheries Boards
 - briefing and advising the Minister.
- 1.4 The following bodies operate under the aegis of the Department.
 - The Central and Regional Fisheries Boards (see over).
 - The Marine Institute. The Institute was established in 1992 to support and promote the sustainable development of Ireland's marine resource, to define the contribution this resource can make to the Irish economy, and to propose and, where necessary, implement the programmes and measures to ensure that this development potential is realised
 - The Foyle Fisheries Commission. The Commission is responsible for the protection and conservation of fisheries in the Foyle Area, which comprises the River Foyle and its tributaries. It is a cross-border body which was established in 1952. The Commission consists of four members, two appointed by the Minister

for the Marine¹ and two appointed by the Department of Agriculture, Northern Ireland

- 1.5 The Central Fisheries Board (CFB) is a statutory body established under the Fisheries Act, 1980. It has primary responsibility for the overall co-ordination, and, where necessary, the direction of the activities of seven Regional Fisheries Boards (RFBs) in the areas of protection, conservation, management and development of the inland fisheries and sea angling resources. The Board also provides specialist services to the RFBs such as scientific, technical, financial, personnel, promotion of angling and engineering services.
- 1.6 The board of the CFB comprises thirteen people: the chairmen of the seven RFBs and six members appointed by the Minister for the Marine. It has 44 full-time staff.
- 1.7 The seven RFBs were also established under the Fisheries Act, 1980. They have statutory responsibilities for the management, conservation, protection, development and improvement of the fisheries within their regions and offshore to the twelve mile limit for the protection of salmon.
- 1.8 The seven RFBs are
- Western Regional Fisheries Board (WRFB)
 - South Western Regional Fisheries Board (SWRFB)
 - Southern Regional Fisheries Board (SRFB)²
 - Shannon Regional Fisheries Board (ShRFB)
 - North Western Regional Fisheries Board (NWRFB)
 - Northern Regional Fisheries Board (NRFB)
 - Eastern Regional Fisheries Board (ERFB).

Appendix A contains a map showing these regions

- 1.9 The board of each RFB contains between 20 and 23 members. Seven members are appointed by the Minister for the Marine. The remaining members represent various

¹ *The two members appointed by the Minister are officials of the Inland Fisheries Division of the Department*

² *In 1996, the Minister for the Marine appointed a Commission to undertake certain functions of the SRFB*

angling interests (such as salmon, trout, sea and coarse anglers), commercial fishermen and fishery owners. The seven RFBs have a total of 265 permanent staff.

- 1.10 Total expenditure administered by the Boards, including expenditure on capital items, was £12.8m in 1995. Expenditure was incurred as set out in Table 1.1.

Table 1.1
Expenditure by Fisheries Boards, including capital items, in 1995

Item	£m	Percentage
Protection	3.8	30%
Development	2.8	22%
Water quality	0.5	4%
Administration and pensions	2.0	15%
CFB operations	3.7	29%
Totals	12.8	100%

Source. Annual Report of the Central and Regional Fisheries Boards for 1995

- 1.11 Appendix B shows an analysis of expenditure by each of the Regional Fisheries Boards
- 1.12 Most of the funds required by the Fisheries Boards are provided by the Exchequer, through the Department. Sources of finance are shown in Table 1.2

Table 1.2
How expenditure by the Fisheries Boards was financed in 1995

Item	£m	Percentage
Exchequer	8.8	69%
EU funds*	1.4	11%
Own resources	2.6	20%
Totals	12.8	100%

Note * EU funds were provided to co-finance the purchase of two large patrol vessels (EU Surveillance Package) and other angling developments (Tourism Operational Programme 1994-1999)

Scope of Value for Money Examination

1.13 The purpose of the value for money examination was to assess the adequacy of the management of inland fisheries. The examination focused on

- overall management of inland fisheries
- management of specific fishing products, viz. coarse fishing, game fishing and sea angling
- management of fisheries protection
- management of water quality

The examination was concerned with the activities of the Department, the CFB and the RFBs. It did not include the activities of the Marine Institute or the Foyle Fisheries Commission.

1.14 The examination was carried out by staff of the Office of the Comptroller and Auditor General. The fieldwork consisted of interviews with personnel in the Department, the CFB and the RFBs and the examination of documents obtained from these bodies. A visit was made to the Foyle Fisheries Commission and reports were obtained from the Agriculture, Environment and Protection Department of the Scottish Office and the Ministry of Agriculture, Fisheries and Food, London.

Part 2 : Overall Management

2.1 In the course of the examination there was abundant evidence of the dedicated approach of those involved in the management of inland fisheries. However, the following weaknesses were evident.

- Objectives of inland fisheries management, as formulated by the Department, lack quantification.
- There is no overall, medium-term plan. There is also a lack of some key information on inland fisheries and no coherent framework for assessing achievement.
- The separate roles of the Department, the CFB and the RFBs have not been adequately defined. In particular, the CFB has a very unclear role. Most of the recommendations contained in two consultancy studies in this regard have not yet been implemented.
- There have been repeated delays in finalising the accounts of the CFB and the RFBs.
- No agency appears to have responsibility for the overseas promotion of angling, with the result that little promotion is carried out.
- Substantial funds for angling development are available under the Tourism Operational Programme, 1994-1999. However, levels of activity and spending are substantially behind target and there is some doubt as to whether the allocated funds will be spent by the end of the Programme.

Objectives

2.2 The objectives of the Department which are relevant to inland fisheries are³

- to facilitate a significant increase in the number of anglers visiting from abroad
- to support a significant increase in employment in angling-related businesses

³ *Making the Marine Matter - Achieving the Potential of Ireland's Marine Resources, Statement of Strategy 1997-1999, Department of the Marine, 1997*

- to develop and put in place a comprehensive national strategy for wild salmon management
- to ensure effective, efficient and well-resourced fisheries protection services, commensurate with Ireland's special responsibilities
- to ensure compliance with conservation, control, health and hygiene and water quality regulations.

- 2.3 This formulation of objectives by the Department lacks precision. In particular, there is little quantification of targets in relation to the objectives. For example, the targeted increase in employment in angling-related businesses is not specified. The one exception regarding quantification occurs in relation to the increase in the number of visiting anglers, where the Tourism Operational Programme, 1994-1999 (Tourism Angling Measure) contains a target for an increase in the numbers of overseas anglers from 179,000 in 1993 to 240,000 by 1999.

Medium-term Plan

- 2.4 Medium-term development plans are important because
- they can provide a focus on aims and objectives
 - they can facilitate the assessment of financial implications of programmes and projects and act as a framework for decision making
 - they can facilitate the monitoring and assessment of progress.
- 2.5 The Department has no medium-term plan for inland fisheries. An important obligation of the CFB under the Fisheries Act, 1980 is to prepare five year development programmes and to review them regularly. Despite this obligation the CFB does not have a current five year development programme.
- 2.6 The Fisheries Act, 1980 also obliges each RFB to prepare a five year development programme and to review it regularly. At the time of this examination, only three of the seven RFBs had current development programmes. WRFB, SWRFB and ShRFB. Other RFBs have plans for individual river catchments

Framework for Assessing Achievement

- 2.7 The general absence of targets and the lack of sufficient information combine to make it very difficult to comprehensively assess the achievements of the Fisheries Boards. Neither the Department nor the CFB has a coherent framework for assessing the achievements of the Fisheries Boards.
- 2.8 According to its Statement of Strategy, 1997-1999, the Department proposes to 'develop reliable indicators of investment, employment, output and other trends in the sectors, to facilitate periodic review of the effectiveness of the Department's actions in supporting and facilitating fisheries development'

Information Deficiencies

- 2.9 Some ongoing operational data is collected by the RFBs on their activities, such as
- numbers of prosecutions for poaching and pollution
 - length of nets seized
 - numbers of patrols
 - fish kills reported
 - number of pollution inspections carried out
 - salmon catches.
- 2.10 While this data is valuable, in that it measures the activities of the RFBs and highlights the threat to fisheries, of even greater significance are the improvements to inland fisheries which result from these activities. Additional information should be collected to assess these improvements.
- 2.11 It is useful to view inland fisheries from both the supply and demand perspectives. From the supply perspective the following should be monitored by the Boards against targets
- numbers of available angling facilities of different kinds such as branded fisheries, angling places, drying rooms, charter boats etc.
 - analysis of fish stocks
 - analysis of water quality.

- 2 12 Information on angling facilities is not collected uniformly across the Boards and is not computerised, with the result that it is not easily accessible, comprehensive and reliable
- 2 13 The RFBs collect data on reported catches of salmon and sea trout each year and the numbers of spawning beds are counted. Also, in the course of preparing river catchment plans, fish stocks are estimated using electrofishing and other techniques. However, information on fish stocks is incomplete in that currently only thirteen rivers have fish counters
- 2 14 The availability of information on stocks of salmon and sea trout will improve with the installation of fish counters in the main rivers under the Tourism Operational Programme 1994-1999. By 1999 it is expected that there will be 33 counters on 32 of the 133 river catchment systems. The Department believes that this will be sufficient to monitor the levels of salmon and trout stocks
- 2 15 Information on water quality is available from the Environmental Protection Agency (EPA)
- 2 16 From the demand perspective the following should be monitored by the Fisheries Boards
- usage of angling facilities, particularly those which have been supported by the Fisheries Boards
 - views of visiting and domestic anglers on the quality of these facilities
 - views of anglers who do not visit Ireland
 - views of overseas tour operators and other relevant specialists on the attractiveness of angling in Ireland
- 2 17 The Fisheries Boards do not systematically monitor annual usage of angling facilities.
- 2.18 Bord Fáilte Éireann carry out a Visitor Attitudes Survey of departing visitors every two years which includes the views of visiting anglers. The survey includes questions on customer care, value for money, range, usage and technical quality of products available, environmental factors and what influenced holiday choice. However, the survey does not provide sufficient information on the perceptions of specialist anglers. Accordingly, it should be supplemented by further marketing surveys, not only of

anglers who visit Ireland but, also of anglers who do not visit Ireland. The views of domestic anglers are also important and these should be monitored to facilitate the development of domestic angling.

2.19 The Marine Institute has applied for funding under the Tourism Operational Programme, 1994-1999 to carry out a series of studies and consultations as follows:

- a detailed survey of visiting anglers in Ireland
- a detailed analysis of the potential market, i.e. anglers in several EU countries and the United States
- consultation with angling interests, the Fisheries Boards and Bord Fáilte Éireann to develop a marketing plan

This proposal has the potential to provide valuable marketing information.

The Roles of the Department, the CFB and the RFBs

2.20 According to the Fisheries Act, 1980 the CFB and the RFBs are separate statutory bodies (Sections 7 and 10). Under Section 8 of the Act the CFB shall

‘co-ordinate, and where it considers it necessary to do so, direct the performance by regional boards of the functions assigned to them under this Act’ and
‘ensure that directions given by the Minister under this section are carried into effect’.

2.21 Doubts arose regarding how much authority the CFB can or should exercise over the RFBs. The fact that the chairmen of the RFBs constitute the majority of the board of the CFB raised the question as to whether the ‘national’ interest could (or should) prevail if regional and national priorities appeared to be in conflict.

2.22 Each year all Fisheries Boards set out operational plans, priorities and detailed estimates of their funding requirements for the year ahead. The vast majority of resources are pre-empted by pay costs and other fixed expenses. The RFB estimates are received by the CFB, passed onto the Department and discussed in detail by the Department and the CFB. The outcome of the ‘estimates’ process is an allocation of resources by the Department to each Board. These are communicated to each Board under two headings:

only - 'Pay' and 'Non-pay' Accordingly, Fisheries Boards are not aware which programmes and projects have been approved or rejected

- 2.23 The practice has arisen whereby RFBs often communicate both with the CFB and the Department on the same issues. Some communications from the Department take the same parallel route i.e. to the RFBs directly and also via the CFB.

Consultants' Report on the CFB

- 2.24 In 1994, the CFB engaged Coopers and Lybrand to review its structures and operations. The consultants found that, while the CFB had adequate expertise and commitment, it lacked policy direction and the role of the organisation was very confused with respect to the Department and the RFBs. Details of the consultants' findings are in Appendix C.

- 2.25 The consultants recommended that the following be introduced on a phased basis.

- A new advisory council on inland fisheries with members drawn from a wide range of interested organisations. This council would prepare a policy statement for inland fisheries to be approved by the Department and communicated to the CFB
- A new management structure for the CFB whereby there would be five executive directors for development, operations, marketing, finance and personnel, respectively. The regional managers would report to the operations director and RFBs would become advisory bodies.
- New management processes and information systems.

- 2.26 The Coopers and Lybrand report was not accepted by the CFB⁴. The CFB had difficulty in accepting some of the findings and the RFBs effectively disassociated themselves from the report.

Consultant's Report on the Fisheries Act, 1980

- 2.27 In 1996, the CFB engaged a legal consultant to assist in drafting a discussion document on the interpretation of the 1980 Fisheries Act. According to the consultant, the Act

⁴ This matter was referred to in my Report on Non-Commercial State Sponsored Bodies, 1994

gives a substantive role to the CFB of co-ordinating and directing RFBs (see Appendix C) The consultant described the role of RFB chairmen when acting as board members of the CFB as follows

‘RFB chairmen as members of the CFB should bring all the concerns of the RFB to the CFB in a fair and balanced way. However, as a member of the CFB participating in a CFB meeting, he must *take into account* the CFB's objects, obligations, policy and role in reaching his decision’

- 2.28 It is unclear from this whether or not RFB chairmen, who constitute the majority of the board of the CFB, should give greater priority to the ‘national’ or ‘regional’ interest where these appear to be in conflict.

Consultants’ Report on Fisheries Services

- 2.29 A reappraisal of the organisation and management structure of all fisheries services was completed for the Minister by Price Waterhouse in July 1996. The consultants recommended that the roles of the Department and the CFB should be strengthened, that the composition of the Boards of the RFBs should be broadened and that the Board of the CFB should comprise a small number of people with appropriate expertise appointed by the Minister for the Marine (see Appendix C for details). These recommendations are being considered.

Preparation of Annual Accounts

- 2.30 Historically, there have been repeated delays in finalising the preparation and audit of the annual accounts of the CFB and the RFBs. Table 2.1 shows the position regarding the issue of audit reports by me on annual accounts for the years 1992-1995.

Table 2 1
Dates on which audit reports were issued on the Annual Accounts
of the Fisheries Boards, 1992-1995 position at May 1997

Fishery Board	1992	1993	1994	1995 ^a
CFB	October 1994	July 1996	July 1996	-
WRFB	November 1995	November 1996	December 1996	-
SWRFB	November 1995	August 1996	November 1996	-
SRFB	March 1996	-	-	-
ShRFB	November 1995	June 1996	October 1996	April 1997
NWRFB	November 1995	June 1996	December 1996	July 1997
NRFB	November 1995	July 1996	November 1996	-
ERFB	November 1995	June 1996	July 1996	-
Average elapsed time in months ^b	34	32	23	

Note ^a Audit fieldwork was completed on the 1995 accounts during 1996. However, accounts adjusted as a result of audits have not yet been presented, with the exception of the ShRFB and the NWRFB

^b In the case of the SRFB, elapsed times for 1993 and 1994 Accounts were calculated up to 1 May, 1997, at which time accounts for these years had not yet been certified

- 2.31 The main reason for the delays in finalising annual accounts for audit is the inadequacy of administrative arrangements in the RFBs, particularly with regard to accounting functions. Because of this, only the ShRFB and the ERFB prepare their own accounts, while the accounts of the remaining RFBs are prepared by the CFB. Computerisation of the accounting records was carried out in the RFBs during 1996 and it is anticipated that this will enable the RFBs to finalise accounts for audit within a more acceptable timeframe.

Overseas Marketing

- 2.32 Traditionally, Bord Fáilte Éireann was regarded as the main promotional agency for attracting overseas anglers to Ireland. Fisheries Boards assisted Bord Fáilte Éireann mainly by producing information leaflets and guides, attending promotions and organising angling events such as competitions

- 2.33 Arising from the review of Bord Fáilte Éireann by A D. Little in 1994 the role of Bord Fáilte Éireann has been changed with the result that it no longer plays a lead role in the marketing of angling overseas; rather it seeks to support private sector initiatives
- 2.34 The Fisheries Boards have the power to promote angling under the Fisheries Act, 1980 However, they find that they have insufficient resources for this because of other operational priorities, such as protection, development and water quality management.
- 2.35 Although there are exceptions, the tourist angling business in Ireland is generally poorly organised. The combination of the changed role of Bord Fáilte Éireann and the lack of marketing resources made available to the Fisheries Boards mean that little overseas promotion occurs. The Department has proposed that the Tourism Operational Programme, 1994-1999, be used to support overseas marketing.

Angling expenditure under the Tourism Operational Programme, 1994-1999

- 2.36 Under the Tourism Operational Programme, 1994-1999, £19m was allocated to the Tourism Angling Measure (TAM) to fund angling development, of which £13m was to be provided by the European Regional Development Fund (ERDF)⁵. The objective of TAM is to ensure that angling facilities in Ireland are upgraded to the best international standards and thereby increase the number of overseas visitors who partake in angling from an estimated level of 179,000 in 1993 to 240,000 by 1999
- 2.37 Many kinds of angling development from both the private and public sectors are eligible for support under TAM. Eligible developments include physical instream and bank development, removal of physical obstructions to the passage of fish, stock management, provision of improved systems for monitoring and protecting water quality, establishment of new stocked coarse and game fisheries, rehabilitation of depleted sea trout fisheries, establishment of title to certain fisheries, acquisition of certain strategic sport fisheries, measures to ensure the rational use and management of sport fish stocks, and the provision of signposts and information material for visitors. Expenditure by Fisheries Boards on promotion, other than the provision of information, is not eligible for support under TAM.

⁵ *Following inflation and exchange rate adjustments, the applicable figure for ERDF is now £13.6m over the period of the Programme*

- 2 38 The Department and the CFB are responsible for TAM. The CFB is responsible for the day to day administration of the measure, with the Department having overall responsibility for its implementation.
- 2 39 The CFB established a special unit of three people within the CFB to manage TAM. This unit publicised TAM and invited proposals from interested organisations, both public and private. Committees were established to appraise and approve projects, respectively. The Department, the CFB, the Marine Institute, the Department of Tourism and Trade and Bord Fáilte Éireann are represented on one or both of these committees. There are no private sector or business people on the committees.
- 2 40 Table 2 2 shows approvals and payments from the ERDF under TAM for the period 1994-1996.

Table 2 2
Approvals and payments of ERDF under TAM (£m) 1994-1996

	1994	1995	1996	Total
	£m	£m	£m	£m
Original forecast for TAM spending of ERDF in Tourism Operational Programme ⁶	1 2	1 1	2 1	4 4
TAM funding approved	Nil	4 4	2 5	6 9
TAM funding spent	Nil	0 3	1 0	1 3
Number of projects approved	Nil	35	45	80
Number of projects that started	Nil	12	13	25

Note * The balance of £9 2m of ERDF funding is allocated for spending in the period 1997-1999.

- 2 41 Spending under TAM at the end of 1996 was less than 30% of the original forecast in the Tourism Operational Programme. The Tourism Monitoring Committee, which oversees the Tourism Operational Programme, was concerned at this and commissioned a special study of TAM from the external evaluator to the Programme.⁶

⁶ *Fitzpatrick's Associates*

The evaluator concluded that

- There is no convincing rationale, at present, for altering the financial allocation to this measure. Overall spending under the measure should be reviewed by the Tourism Monitoring Committee as part of its end-1997 expenditure review
- The allocation of funding across the different types of angling needs to be altered with more attention given to rectifying the problems which are currently leading to the falling popularity of coarse and sea angling. This should also help to focus additional resources on areas other than the West, particularly the Border and Midlands regions
- Substantially more attention needs to be paid to the international promotion of Ireland's angling product. In the short term some £150,000 should be transferred out of TAM to another measure in the Tourism Operational Programme to fund the international promotion of angling.
- There are significant problems with the evaluation of projects and the EU Projects Management Unit should be transferred out of the CFB

2.42 In order to address the lack of overseas marketing the Department has proposed to the Tourism Monitoring Committee that £300,000 be transferred from TAM to another measure in the Programme to support market research and promotion overseas.

Part 3 : Management of Specific Fishing Products

3.1 The products included in inland fisheries management are

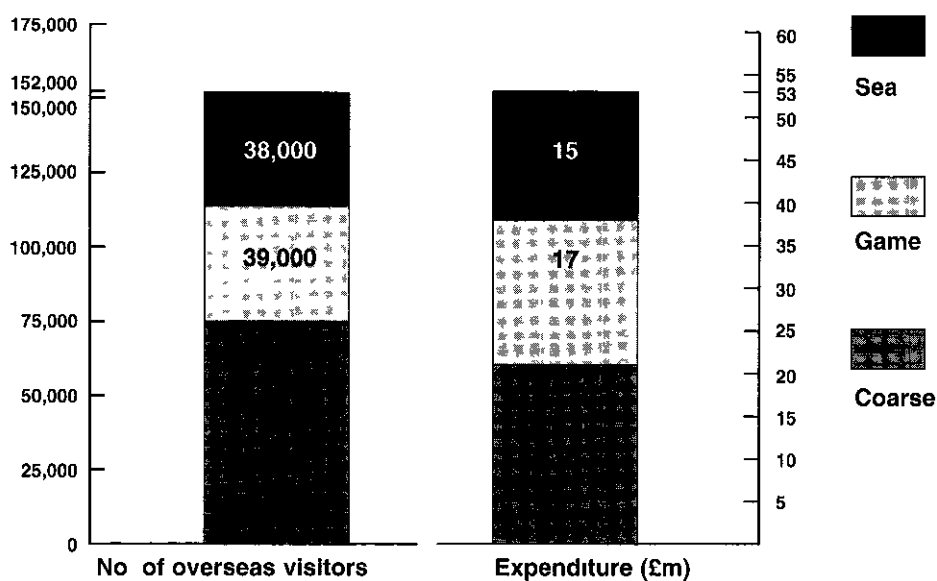
- coarse fishing
- game fishing
- sea angling

Freshwater angling species are divided into two basic groups: game fish or salmonids, (mainly salmon and trout) and coarse fish (all other freshwater species). Strictly speaking, eels are neither 'coarse' nor 'game'; however, in this report eels receive separate consideration under coarse fishing. Sea angling consists of fishing with a rod and line from the shore or from a boat.

Overview

3.2 Some 152,000 overseas visitors engaged in angling in Ireland in 1995 and spent approximately £53m. Figure 3.1 shows the numbers of these visitors and their expenditure while in Ireland under each fishing product.

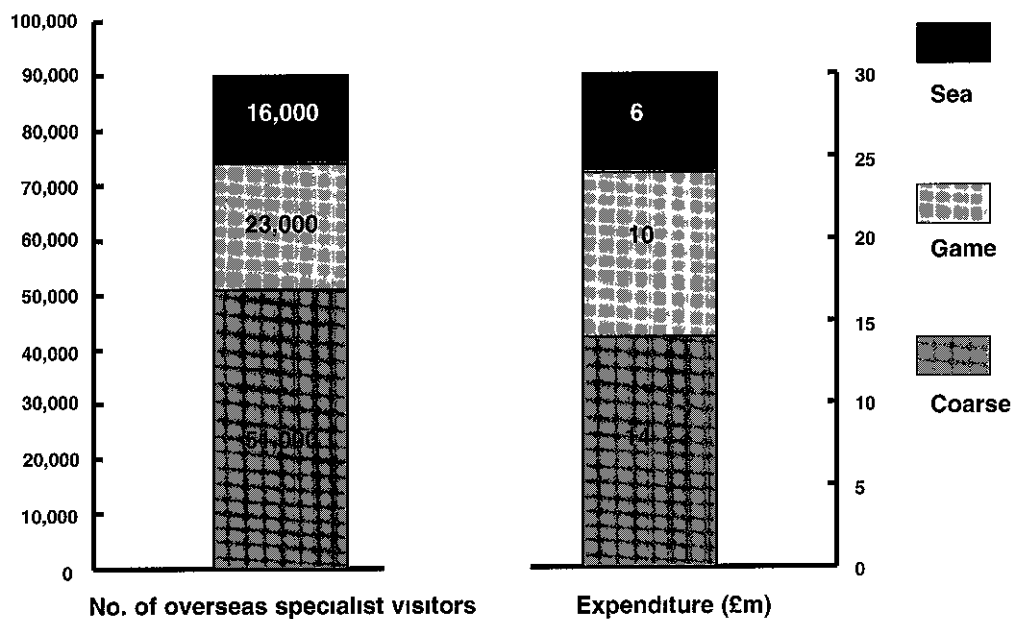
Figure 3.1
Number of overseas visitors and expenditure (£m) in 1995



Source: Bord Fáilte Éireann. Some overseas visitors engage in more than one type of fishing. The gross sectoral figures in all tables have been adjusted to agree with the overall totals to avoid double counting.

- 3.3 Overseas visitors for whom angling led to the choice of Ireland as a holiday destination are of particular interest. For these specialist visitors, the angling product is not merely an extra activity in which they take part but an important reason for coming to Ireland. 90,000 specialist overseas anglers visited Ireland in 1995 and spent £30m. Figure 3.2 shows the number of specialist overseas visitors and their expenditure by product in 1995.

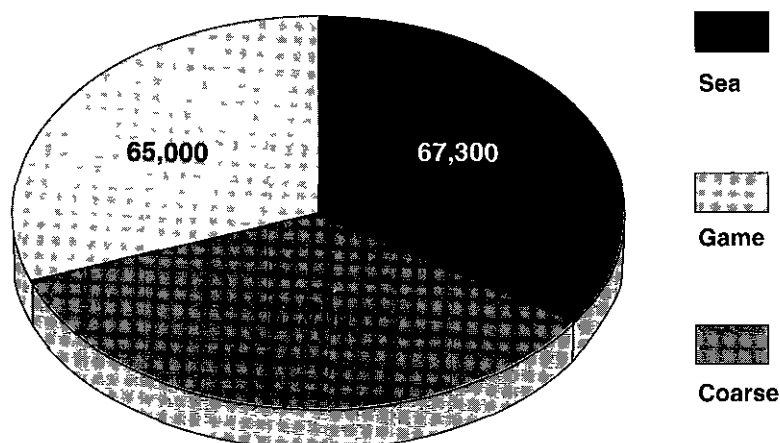
Figure 3.2
Number of specialist overseas visitors and expenditure (£m) by product in 1995



Source. Bord Fáilte Éireann

- 3.4 For domestic residents angling is an important recreational activity. A recent study showed that some 190,000 Irish people participated in angling in 1996 and spent £27m on angling related activities. Figure 3.3 shows the breakdown analysed by product in 1996.

Figure 3 3
Number of domestic anglers analysed by product in 1996



Source Angling Tourism and the Irish Economy, Marine Institute/ESRI, 1996

- 3 5 In the course of this examination estimates were made, in consultation with the CFB, of the proportions of the resources of the Fisheries Boards which were devoted to the different fishing products and to water quality management in 1995. The results are set out in Table 3 1

Table 3 1
Fisheries Boards' expenditure by Sector in 1995

Sector ^a	£m	Percentage
Coarse	2.1	16%
Game	9.7	76%
Sea Angling	0.1	1%
Water quality	0.9	7%
Total	12.8	100%

Note ^a Fisheries Boards do not classify their expenditure in this way accordingly, the sectoral figures are approximate

Coarse Fishing

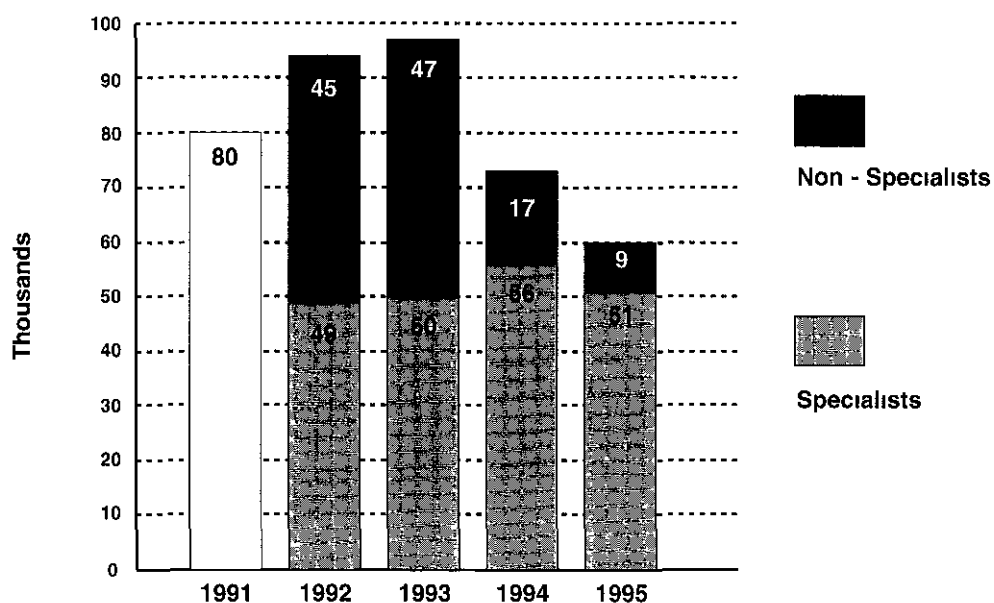
- 3.6 The main coarse species are bream, roach, pike, rudd, perch, tench and carp. The coarse fishing season extends over the whole year. A state licence is not required and most water can be fished without a permit
- 3.7 The conclusions regarding the management of coarse fishing are that
- coarse fishing has high economic and social importance
 - the Boards devote relatively modest resources to the product
 - the further potential of coarse fishing appears to be high
 - eels have received little attention from the Boards despite their high economic potential

Economic and Social Importance

- 3.8 As shown in Figure 3.1 and Figure 3.2 respectively, coarse fishing is the most important product in terms of overseas visitor numbers and of revenue and, in terms of overseas 'specialist' revenue, coarse angling is almost as important as game and sea angling combined.
- 3.9 Bord Fáilte Éireann does not have consistent data from 1991 for coarse angling visitors from overseas. However, data is available for the number of overseas holidaymakers⁷ and from 1992 it is possible to distinguish between specialists and non-specialists. Figure 3.4 shows that the total number of coarse angling holidaymakers has fallen from a high of 97,000 in 1993 to 60,000 in 1995. However, the number of specialists has generally been maintained at around 50,000.

⁷ Visitors whose main purpose in coming to Ireland is to have a holiday. Thus 'holidaymaker' excludes business visitors, conference attenders etc

Figure 3.4
Numbers of overseas coarse angling holidaymakers, including specialists
and non-specialists 1991-1995^a



Source Bord Fáilte Éireann

Note There is no breakdown of holidaymaker data for 1991 into the components of specialist and non-specialist

- 3.10 In the case of domestic residents, coarse fishing has grown more rapidly than other types of fishing, as shown in Table 3.2.

Table 3 2
Number of domestic anglers by type of fishing 1987-1996

Types of fishing	1987	1996	% change
Coarse	15,800	57,700	+265%
Game	62,800	65,000	+4%
Sea	43,600	67,300	+54%

Source Studies carried out by ESRI

- 3.11 If this rapid rate of growth in the number of coarse anglers was to continue, it would take only two years for the number of Irish coarse anglers to surpass the number of game anglers

Resources Spent on Coarse Fishing by the Fisheries Boards

- 3.12 Although coarse fishing is the most important angling product for overseas visitors and is the fastest growing sector for Irish residents a relatively low level of resources is devoted to the product (see Table 3.1)
- 3.13 Activities of the Fisheries Boards in this area include the construction of stiles and fishing stands, the production of information guides and leaflets, the stocking of lakes, canals etc, and research. However, separate data for coarse fishing outputs are not available.
- 3.14 One explanation for low spending on coarse angling is that, historically, most of the attention and resources of the Fisheries Boards have been devoted to game fish. The Boards have stated that greater attention is now being devoted to coarse fishing. In particular, TAM funding for the purpose of identifying the ownership of waterways is being focused on coarse angling lakes in 1997.

The Further Development of Coarse Fishing

- 3.15 With modest resources the Fisheries Boards, in co-operation with Bord Fáilte Éireann, have succeeded in sustaining coarse fishing for overseas visitors and in developing coarse fishing for Irish anglers.
- 3.16 The coarse fishing season extends throughout the year and many overseas coarse fishing visitors come to Ireland outside the peak tourist season of July/August. While the proportion of coarse angling visitors arriving outside these peak months is not known, the product appears to make an important contribution to off-season tourism revenue.
- 3.17 In addition, coarse fishing occurs throughout the country. It is particularly important in the Shannon, Eastern, Northern and Western Regions. Coarse fishing has an important contribution to make towards ensuring greater regional distribution of tourism within Ireland.
- 3.18 In order to develop the overseas angling markets for coarse fishing it is necessary to match the angling products to the desires of the overseas markets. The marketing plan for overseas angling, which the Marine Institute proposes to develop, should assist in this regard. This will need to be complemented by an overall development plan for coarse fishing which will encompass both the supply and demand sides of development.

Eels

- 3.19 Eel fishing is highly regulated, with closed seasons and a requirement for commercial fishing licences and dealers' licences. The main activity of the Fisheries Boards in this area is enforcement of these regulations, especially against poachers.
- 3.20 The value of eels caught has been estimated at up to £1m per annum. However, studies carried out by Forbairt, the Electricity Supply Board and the Marine Institute indicate that there is considerable potential for development of this area and that annual production could be quintupled.
- 3.21 The Marine Institute is drafting a national policy for the development of the eel industry.

Game Fishing

- 3.22 Ireland's game fisheries are based on Atlantic salmon, sea trout and brown trout. All game fishing is restricted to seasons. There are statutory opening and closing dates for each fishery district and the seasons differ, even in the same river, for salmon, sea trout and brown trout angling. A state licence is required to fish for salmon and sea trout and on most waters permits are also required. Commercial fishing for salmon and sea trout, using nets at sea and in estuaries, is regulated by the issue of state licences. Salmon dealers' licences are also issued.
- 3.23 The conclusions regarding the management of game fishing are that
- It has somewhat less economic and social importance than coarse fishing. However, the presence of game fish provides assurance that Irish waters are of very high quality.
 - The Fisheries Boards devote over three quarters of their resources to the product.
 - As the most complex of the three fishing products, its development needs to be very carefully planned.

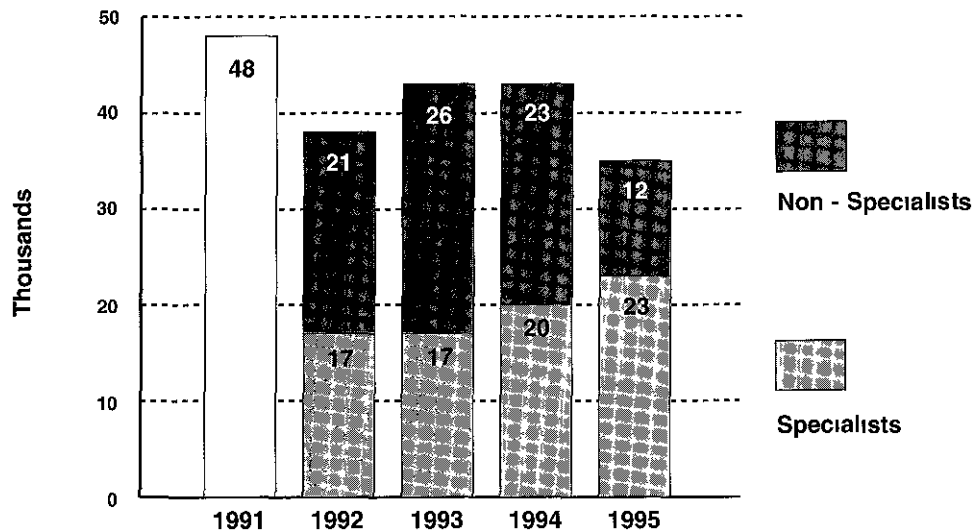
Economic and Social Importance

- 3.24 As shown in Figure 3.1, in 1995, both the number of overseas game anglers and their total expenditure, while in Ireland, were lower than for coarse anglers. It is worth

noting, however, that expenditure per visitor was around £440 on average for each visiting game angler as against £280 for each coarse angler.

- 3.25 In recent years there has been a decline in the number of overseas holidaymakers and a slight increase in specialist anglers who engaged in game angling. The trend in overseas game angling holidaymakers in recent years is set out in Figure 3 5

Figure 3 5
Numbers of overseas game angling holidaymakers, including specialists
and non-specialists 1991-1995^a



Source Bord Fáilte Éireann

Note. ^a There is no breakdown of holidaymaker data for 1991 into the components of specialist and non-specialist.

- 3.26 At the time of the examination there were 645 fishermen licenced to fish commercially for salmon using drift nets off shore (nets which are not fixed to the shore) and a further 446 fishermen licenced to fish commercially using draft nets (nets which are fixed to the shore, generally in estuaries). Commercial catches of salmon in recent years are set out in Table 3.3.

Table 3 3
Commercial catches of salmon 1991-1995

Commercial Salmon catches in 1000 kgs	1991	1992	1993	1994	1995
Drift	267	449	378	590	566
Draft	105	120	115	145	114
Other	3	13	9	14	26

Source Annual Reports of the Central and Regional Fisheries Boards and the Department

3.27 It is widely believed that these official figures substantially understate the commercial salmon catch. The market value to fishermen in all regions of the declared commercial catch in 1995 may be in the region of £2m⁸. In contrast, expenditure on game angling by overseas visitors amounted to £17m.

3.28 Game fish do not tolerate polluted waters and poor habitats. Thus, an important benefit from the conservation of game fish is that it provides assurance, for both Irish residents and overseas visitors, that Irish waters are of a very high quality. In contrast, very few European countries have abundant game fish, which is partly due to water quality.

Resources Spent on Game Fishing by the Fisheries Boards

3.29 It is estimated that the Fisheries Boards spent some 76% of their resources on game fishing in 1995, which amounted to some £9.7m (see Table 3.1).

3.30 The high spending by the Fisheries Boards on game fishing relative to other products may be explained partly by historical factors, such as the traditionally perceived importance of game fish and by the emergence of the Fisheries Boards in the 1980s from their antecedent organisations. Game fishing is also more complex than either coarse fishing or sea angling in that

- game species are more prone to disease
- quality of habitat must be kept at a very high level
- species are subject to depopulation due to poaching and commercial fishing

⁸ *Employing the salmon price used by the Salmon Management Task Force, 1996*

- further depopulation occurs as game fish are usually killed rather than returned alive to the water by anglers, as is the general practice in coarse fishing and, to a lesser extent, in sea angling

3.31 The Fisheries Boards carry out a range of functions for the sector viz

- protection from poaching (see Part 4)
- administration of licences, permits and fishery rates
- river catchment plans
- promotion/information
- research
- re-engineering of rivers
- establishing title to fishing rights.

The Further Development of Game Fishing

3.32 The Fisheries Boards have devoted considerable resources to the protection, conservation and development of game fishing. The numbers of overseas specialist game anglers and the number of domestic anglers have been maintained. The majority of the recorded salmon catch continues to be taken by commercial fishermen.

3.33 Many game anglers arrive in Ireland outside the peak tourist season of July/August. However, the extent to which this occurs is not known. Given that there are 'closed' seasons for all game species in all fishery districts it is unlikely that the visiting pattern of overseas game anglers is as favourable as for coarse anglers.

3.34 Game angling and commercial fishing occur mainly on or near the Atlantic coast. Game fish are particularly important for the Northern, North Western, Western, South Western and Southern Regions. Thus game fishing, like coarse fishing, has an important contribution to make towards ensuring greater distribution of tourism within Ireland.

3.35 There are particular features of game angling which make overseas marketing particularly difficult and these would need to be addressed in the marketing plan which the Marine Institute proposes to develop. These include

- possible negative perceptions regarding poaching and the quality of angling
- lack of familiarity with game angling in many potential markets.

3 36 A development plan for game angling is required. In order to be successful such a plan will need to address some very difficult issues including

- increased efficiency of the protection programme
- substantial progress on ownership/access issues
- improved monitoring of fisheries' development plans
- assured quality of habitat

Sea Angling

3 37 The seas around Ireland contain many species of interest to the sea angler including salmon, bass, dab, pollock and shark. There is no 'closed' season for sea angling, and there is no requirement for a state licence or fishing permit.

3 38 The conclusions regarding the management of sea angling are that

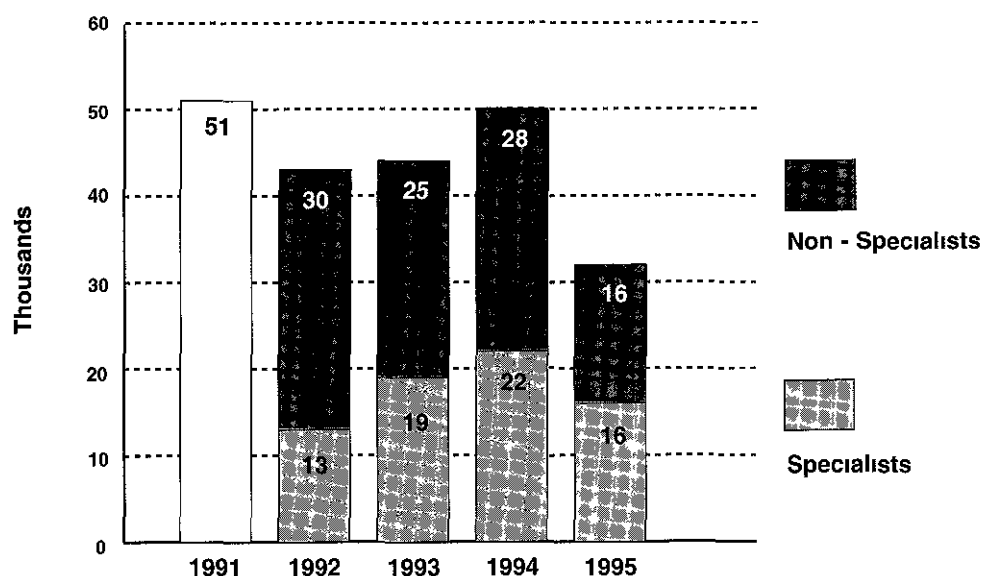
- sea angling has somewhat less economic and social importance than game angling
- the Fisheries Boards devote negligible resources to sea angling
- the further potential of sea angling appears to be high

Economic and Social Importance

3.39 As shown in Figure 3.1 in 1995 both the number of overseas sea anglers and their expenditure, while in Ireland, were lower than for coarse angling and game angling. Expenditure per visitor was approximately £380 on average for each visiting sea angler as against £440 for each visiting game angler and £280 for each visiting coarse angler.

3 40 The number of overseas holidaymakers who engaged in sea angling has not grown in recent years and there was a considerable fall in the number of holidaymakers in 1995. The trend in overseas sea angling holidaymakers in recent years is set out in Figure 3.6.

Figure 3 6
Numbers of overseas sea angling holidaymakers, including specialists
and non-specialists, 1991-1995^a



Source Bord Fáilte Éireann

Note ^a There is no breakdown of holidaymaker data for 1991 into the components of specialist and non-specialist.

- 3.41 As shown in Table 3.2 there are more domestic residents who are sea anglers than either coarse or game anglers. Table 3.2 also shows that the number of domestic sea anglers has grown substantially in recent years, although at a lower rate than for coarse anglers.

Resources Spent on Sea Angling by the Fisheries Boards

- 3.42 It is estimated that the Fisheries Boards spent only 1% of their resources on sea angling in 1995 amounting to some £120,000. (See Table 3.1.) The main activities of the Fisheries Boards in this area were the provision of signposting, funding of access roads and car parks, and the provision of information guides and leaflets. However, the Tourism Operational Programme, 1994-1999, provides grant support for the purchase and upgrading of sea angling boats outside of TAM⁹. Up to mid-1996, over £1m was provided.

⁹ Subprogramme 2, Measure 4, which is operated by Bord Fáilte Éireann

The Further Development of Sea Angling

- 3.43 A substantial number of overseas visitors engage in sea angling while in Ireland and it is also the most popular type of angling for Irish people. The efforts of private operators, the high quality guides produced by the Fisheries Boards and overseas promotion by Bord Fáilte Éireann have contributed to this
- 3.44 While sea angling can occur throughout the year it is perceived that overseas visitors who engage in sea angling are concentrated in the peak summer months of July/August. Given the lack of attention that has been devoted to sea angling by the Fisheries Boards it is unclear whether or not sea angling has potential to contribute significantly to 'off-peak' tourism growth.
- 3.45 While domestic sea angling naturally occurs near the larger centres of population and along the East coast, tourism sea angling favours the North Western, Western and Southern coasts. Thus sea angling has an important contribution to make towards ensuring greater regional distribution of overseas tourism within Ireland
- 3.46 Some particular strengths of sea angling from a development perspective are that
- it is not affected by ownership/access problems
 - it is not significantly affected by poaching.
- 3.47 The marketing studies proposed by the Marine Institute will, if proceeded with, be helpful for the development of sea angling for tourists. The conclusions regarding whether (and how) the sea angling season can be extended will be of particular relevance
- 3.48 A development plan for the product is required. This plan should identify the targets and actions required so that the potential of sea angling, which is largely unknown, can be exploited.

Part 4: Management of Fisheries Protection

- 4.1 The RFBs have statutory responsibility to protect salmon, sea trout, molluscs, eels and all freshwater fish from illegal fishing. Their powers extend to sea for 12 nautical miles. The main objective is to increase stocks of salmon, sea trout and brown trout by enforcing the fishing laws. It is estimated that only a minor proportion of expenditure on protection (less than 5%) is applied towards non-game fish, mainly eels.
- 4.2 RFBs carry out patrols at sea, in estuaries and in rivers and lakes.
- 4.3 In 1994 the CFB became active in co-ordinating protection activities and in 1996 a full time protection co-ordinator was appointed in the CFB. The task of the co-ordinator is to ensure that all the resources of the State covering the CFB, RFBs, Garda Síochána, the Naval Service and Air Corps - are deployed in the most effective manner. The co-ordinator also directs the deployment of two large patrol vessels which are owned by the CFB.
- 4.4 Fishery protection work is often arduous and assaults on Fishery Officers are not uncommon. Safety procedures have been strengthened and new boats known as Rigid Inflatable Boats (RIB), communications equipment and clothing have been supplied to all RFBs. The CFB plans to introduce the use of video cameras on patrols to assist in gathering evidence and also to act as a deterrent against violent behaviour towards Fishery Officers.
- 4.5 The conclusions regarding the management of fisheries protection are that
- all RFBs devote a high proportion of their resources to fisheries protection
 - although all RFBs are active in issuing prosecutions and in seizing illegal nets, the utilisation of patrol boats for protection work varies substantially across the regions
 - certain changes have been introduced for the 1997 fishing season with a view to increasing the efficiency of fishing protection.

Expenditure on Protection

- 4.6 Protection activities account for over half of the direct expenditure by RFBs (see Table 1.1). A breakdown by region is set out in Table 4.1

Table 4 1
Direct Expenditure by RFBs on protection in 1995

Fisheries Board	1995 Direct Spend on Protection £'000	Percentage
WRFB	582	15%
SWRFB	634	17%
SRFB	548	14%
ShRFB	325	9%
NWRFB	569	15%
NRFB	565	15%
ERFB	564	15%
Total	3,787	100%

Source Annual Report of the Central and Regional Fisheries Boards for 1995

In addition, approximately £1m was spent by the CFB in 1995 on the acquisition and operation of large patrol vessels

Performance

4.7 Outputs expected from protection activities include

- deterrence of poachers
- issue of prosecutions
- seizure of nets

The first output is difficult to measure as only detected poachers are counted. All RFBs are active in issuing prosecutions and in seizing nets. The extent of these activities between 1991 and 1995 are set out in Table 4.2.

Table 4 2
Number of prosecutions and net seizures (in yards) 1991-1995

	1991	1992	1993	1994	1995	Annual average
No of Prosecutions	369	389	344	294	263	332
Net Seizures (yards)	70,300	107,600	93,400	74,800	110,500	91,300

Source Annual Report of the Central and Regional Fisheries Boards for 1995

Appendix D contains the details by region.

- 4 8 Another useful performance indicator of protection activities is the proportion of available resources (mainly staff and boats) actually deployed on protection duty (rather than being absorbed by administration or lying idle). All Fisheries Boards monitor the utilisation of boats. This varies across the regions as set out in Table 4.3

Table 4 3
Sea and Estuary Patrols · Number of times boats were used in 1995 by region

	WRFB	SWRFB	SRFB	ShRFB	NWRFB	NRFB	ERFB
Number of RIBs available	3	3	4	3	4	6	3
Number of 2 boat operations	29	9	35	8	24	13	15
Number of 1 boat operations	46	13	97	27	63	28	16
Number of times each boat was used	35	10	42	14	28	9	15

Source The CFB

Recent Initiatives

- 4 9 Arising from concern about the level of salmon stocks the Minister for the Marine established a Salmon Management Task Force to examine the situation and make recommendations. The Task Force reported in 1996.
- 4 10 Arising from the recommendations in this report the Minister for the Marine has put in place certain changes for commercial drift net salmon fishing in the 1997 season with a view to increasing the efficiency of fishing protection. The main changes are
- A reduction in the offshore fishing limit from twelve miles to six miles
 - A lifting of the ban on monofilament nets.
 - The restriction of permitted fishing periods to four days a week from 1 June to 31 July and to the daylight hours of 4am to 9pm (Prior to this, fishing had been permitted earlier than June and up to August for five days a week, around the clock)

- 4.11 The Department expects that the *de facto* halving of the drift net season and of the sea area which can be fished commercially will result in greater numbers of salmon entering the rivers
- 4.12 A series of more radical measures to conserve salmon stocks was also proposed by the Salmon Management Task Force, based on the premise that it is more sensible to seek to *directly* control the numbers of fish caught rather than *indirectly* as at present by means of controlling fishing effort. Under the proposed measures Total Allowable Catch figures will be set nationally for each fishery region and each river system based on scientific data concerning movements of fish upstream, spawning counts and much improved catch statistics. All commercially caught fish will be tagged to facilitate more accurate catch estimates and the sale of rod caught fish will not be permitted. It was acknowledged by the Salmon Management Task Force that additional staff (numbers unspecified) would be required to implement these measures. The Marine Institute is currently studying the implications of this proposal
- 4.13 In 1986 the CFB proposed greater use of aerial patrols with appropriate photographic and navigational equipment¹⁰. This would need to be combined with a change in the law so that the registered owners of vessels could be held responsible for any fishery offences established on the basis of specified photographic evidence obtained on such aerial patrols (Under current legislation the occupant, rather than the owner, of the boat must be identified for a prosecution to occur). This proposal appears to have the potential of reducing further the need for confrontation with fishermen at sea.
- 4.14 Ultimately protection activities should result in greater numbers of fish in the rivers. One method of monitoring fish numbers is to install automatic fish counters. Most rivers do not have counters and reliance is placed on counts of upstream spawning beds by the staff of RFBs. However, under the Tourism Operational Programme, 1994-1999, it is intended to install many more counters. In addition to providing data on fish movements the use of counters also offers the possibility of controlling the extent of fishing in 'real time'¹¹. For example, the Foyle Fisheries Commission uses a fish counter at Sion Mills to direct, partly in 'real time', the type and extent of fishing which may be carried out on the Foyle River and estuary.

¹⁰ *Inland Fisheries Strategies for Management and Development, Central Fisheries Board, 1986*

¹¹ *This means that fishing can be curtailed immediately if stocks are low*

Part 5: Management of Water Quality

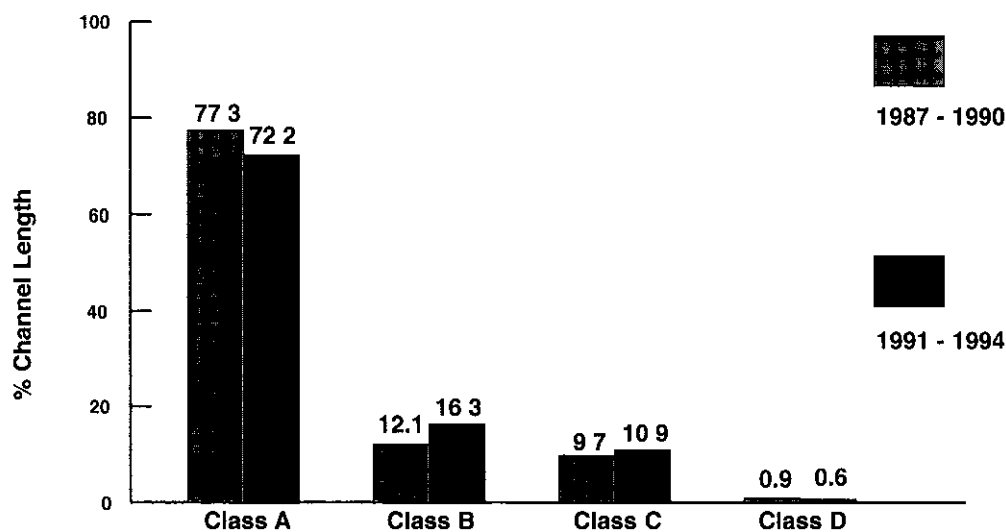
- 5.1 Good water quality is required for fish survival and particularly high quality water is required for game fish. Under the Fisheries Act, 1980 the RFBs are responsible for protecting fisheries' habitats. The RFBs have powers to monitor water quality and to prosecute polluters. In addition, they must receive notice of relevant planning applications from the planning authorities. Several other organisations also have statutory functions in relation to water quality, including the EPA and local authorities.
- 5.2 The conclusions regarding the management of water quality are that
- while the amount of seriously polluted waters has declined in recent years the amount of unpolluted waters has also declined
 - RFBs have played an important role in monitoring and combatting water pollution but there is significant duplication of effort with local authorities
 - in the face of the increase in slight and moderate pollution of formerly pristine waters, Fisheries Boards have taken several initiatives, in consultation with other public bodies, to seek to overcome this problem
 - a comprehensive strategy to overcome the problem has not yet emerged

Change in Water Quality

- 5.3 The EPA monitors the quality of water, using data derived mainly from its own surveys, the local authorities and the CFB. In 1996 it produced a comparison of water quality in Ireland between the period 1987-1990 and the period 1991-1994¹². The comparison showed that the percentage of unpolluted river waters (Class A) declined and the percentages of slightly and moderately polluted river waters (Classes B and C) increased. However, there was a decrease in the percentage of seriously polluted waters (Class D). The comparisons are set out in Figure 5.1

¹² *Water Quality in Ireland 1991-1994* Environmental Protection Agency, 1996

Figure 5 1
Percentage of channel length covering the four biological quality classes 1987-1990 and
1991-1994



The Role of Fisheries Boards

- 5.4 Approximately 7% of Fisheries Board resources (including the CFB) amounting to some £850,000 was applied to water quality activities in 1995 (see Table 3 1). While the CFB does not formally coordinate the water quality activities of the RFBs it provides substantial research backup to them. Traditionally, the main role of the RFBs has been to identify fish kills and pollution incidents wherever they occur, analyse the causes and prosecute offenders. The numbers of reported fish kills in each region for 1991-1995 are set out in Table 5 1.

Table 5 1
Number of fish kills 1991-1995

Fisheries Region	1991	1992	1993	1994	1995	Annual
WRFB	3	4	1	2	3	3
SWRFB	7	3	5	2	12	6
SRFB	20	15	1	9	20	13
ShRFB	15	5	6	7	14	9
NWRFB	1	1	2	2	4	2
NRFB	8	7	17	10	19	12
ERFB	7	7	7	3	16	8
Totals	61	42	39	35	88	53

Source Annual reports of the Central and Regional Fisheries Boards

- 5.5 The RFBs have powers to prosecute polluters under the Fisheries (Consolidation) Act, 1959. Local authorities also have powers to prosecute polluters, under the Local Government Water Pollution Acts, 1977 and 1990. Table 5.2 shows the number of prosecutions, distinguishing between those initiated by the RFBs and the local authorities between 1991 and 1995.

Table 5 2
Prosecutions for water pollution initiated by RFBs and Local Authorities in 1995

	1991	1992	1993	1994	1995	Annual Average
RFBs	100	96	46	74	71	77
Local Authorities	73	62	84	28	42	58

Source Annual Reports of the Central and Regional Fisheries Boards and Environmental Bulletins, Department of the Environment

Appendix E shows the prosecution details analysed by county for 1995.

- 5.6 It appears that there is significant duplication between the roles of the Fisheries Boards and the local authorities. The main areas where similar activities are carried out are in
- undertaking investigations / inspections
 - issuing advice / warnings
 - initiating prosecutions
 - monitoring water quality.
- 5.7 This duplication is inefficient and some of it could be avoided if the respective roles of Fisheries Boards and local authorities were reviewed. It is interesting to note that in Northern Ireland the Foyle Fisheries Commission is contracted by the Northern Ireland Department of the Environment to collect water samples in the Foyle catchment area for analysis by the Department with the result that duplication of sampling and testing is avoided.
- 5.8 Local authorities have powers in relation to water quality which are not available to the Fisheries Boards including
- The granting of licences for the discharge of effluent into water.
 - Serving a notice requiring specific action to be taken to prevent polluting matter from entering water
 - Requiring farmers to produce nutrient management plans
 - The making of byelaws to reflect good agricultural practice. Examples include minimising fertiliser use in ecologically sensitive areas or confining the spread of slurry to certain weeks of the year
- 5.9 The first two of these powers are used extensively. The latter two had not yet been used as at February 1997
- 5.10 The EPA's powers include
- the licensing and regulation of large and complex industrial and other processes which have significant polluting potential
 - setting environmental quality objectives
-

- reviewing the performance of local authorities with regard to environmental protection and directing this performance, where necessary.

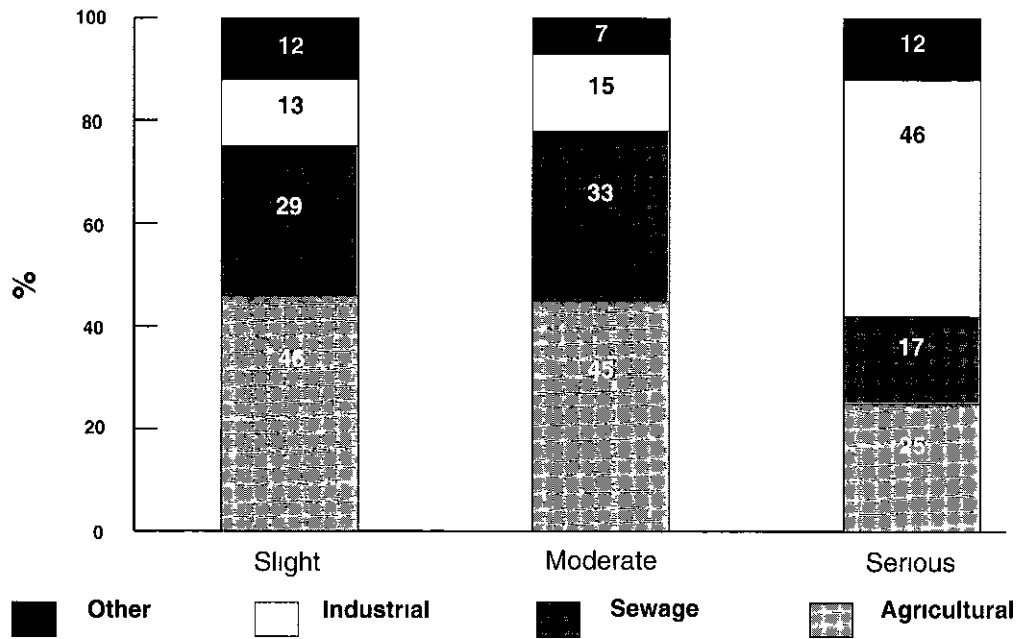
5.11 While it might appear on efficiency grounds that the water quality management activities of the Fisheries Boards could be transferred to the local authorities, the Department, the CFB and the RFBs are of the view that the activities of the Fisheries Boards are important notwithstanding the powers of the local authorities in that

- The Fisheries Boards usually prosecute under the Fisheries (Consolidation) Act, 1959 which is stronger than the Water Pollution Acts, 1977 and 1990, used by the local authorities. An essential difference is that the 1959 Fisheries Act allows no defence to the polluter (such as accident, compliance with planning permission or intention to carry out remedial works), whereas such defence arguments may be successful under the Water Pollution Acts.
- Fisheries Boards can, and do, prosecute local authorities. For example, in 1995 six pollution prosecutions were initiated by Fisheries Boards against local authorities.
- Fisheries Boards are more focused towards maintaining very high quality waters, not only in lakes and rivers but also in streams.

Initiatives Taken To Combat Increasing Slight and Moderate Pollution

5.12 While some progress has been made by Fisheries Boards and local authorities in combatting serious pollution (see Figure 5.1), moderate and slight pollution has increased. The main sources of slight, moderate and serious pollution in the period 1991-1994 are set out in Figure 5.2.

Figure 5 2
Percentage of slight, moderate and serious pollution in Irish rivers due to agriculture, sewage, industry and other sources in the period 1991-1994



Source Water Quality in Ireland 1991-1994, Environmental Protection Agency, 1996.

- 5.13 When significant point sources of effluent are identified, which give rise to serious pollution, the enforcement of legislation by the Fisheries Boards may be relatively straightforward, in that evidence may be gathered and warnings and prosecutions may be issued. Remedial action is usually possible if the point source of pollution is a farm, a sewage plant, or a factory
- 5.14 It is considered, however, that non-point discharges, especially from agriculture, are a significant cause of slight and moderate water pollution¹³. The situation regarding the control of non-point discharges is far more complex than point discharges. Many of the measures open to the Fisheries Boards in the case of point discharges (i.e. identifying the sources of pollution, gathering evidence and issuing warnings and prosecutions) are much more problematic and difficult.

¹³ Phosphorous/Chlorophyll relationships and criteria for Irish lakes, T S W Champ, paper presented at the seminar on Eutrophication in Irish Waters, Royal Irish Academy, 1996

5.15 Fisheries Boards have taken the following initiatives to seek to combat the increasing incidence of slight and moderate pollution

- research (often in conjunction with other public bodies) which seeks to identify, for particular rivers and lakes, the sources of pollution and the activities leading to nutrient enrichment
- education, especially of farmers in the Rural Environment Protection Scheme (REPS), regarding the effects of excessive fertiliser usage
- lobbying of bodies such as the Department of Agriculture and Food and Teagasc regarding issues such as the desired level of phosphorous in agricultural land
- active participation in the planning process¹⁴, which involves consulting with local authorities, EPA and Teagasc and also lodging objections to certain development proposals
- regular meetings with other public organisations and representative bodies

5.16 Local authorities are engaged in an extensive programme of upgrading waste water treatment facilities of towns, including the removal of phosphorous in the case of large towns and ecologically sensitive areas. In addition, Water Quality Management Plans have been drawn up by local authorities for several waterways and more are being prepared

5.17 The Department of the Environment has recently prescribed environmental quality objectives / standards for phosphorous in rivers and lakes¹⁵. The EPA has drawn up a draft programme for the monitoring of water quality in lakes. In addition, the EPA is finalising a discussion document on quality standards for all waters¹⁶

¹⁴ *The Regional Fisheries Boards and the Central Fisheries Board are notifiable agencies in respect of the Local Government (Planning and Development) Regulations, 1977 to 1990 and the Environmental Protection Agency (Licensing) Regulations, 1994 (S.I. 85/94)*

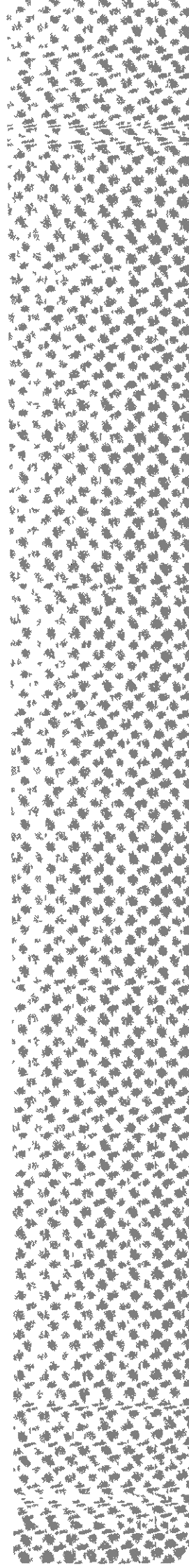
¹⁵ *Managing Ireland's Rivers and Lakes: A Catchment-based Strategy Against Eutrophication, Department of the Environment, 1997*

¹⁶ *Currently only a minority of waters are protected with a 'salmonid' (very high quality) designation*

A Strategy to Overcome Increasing Slight and Moderate Pollution

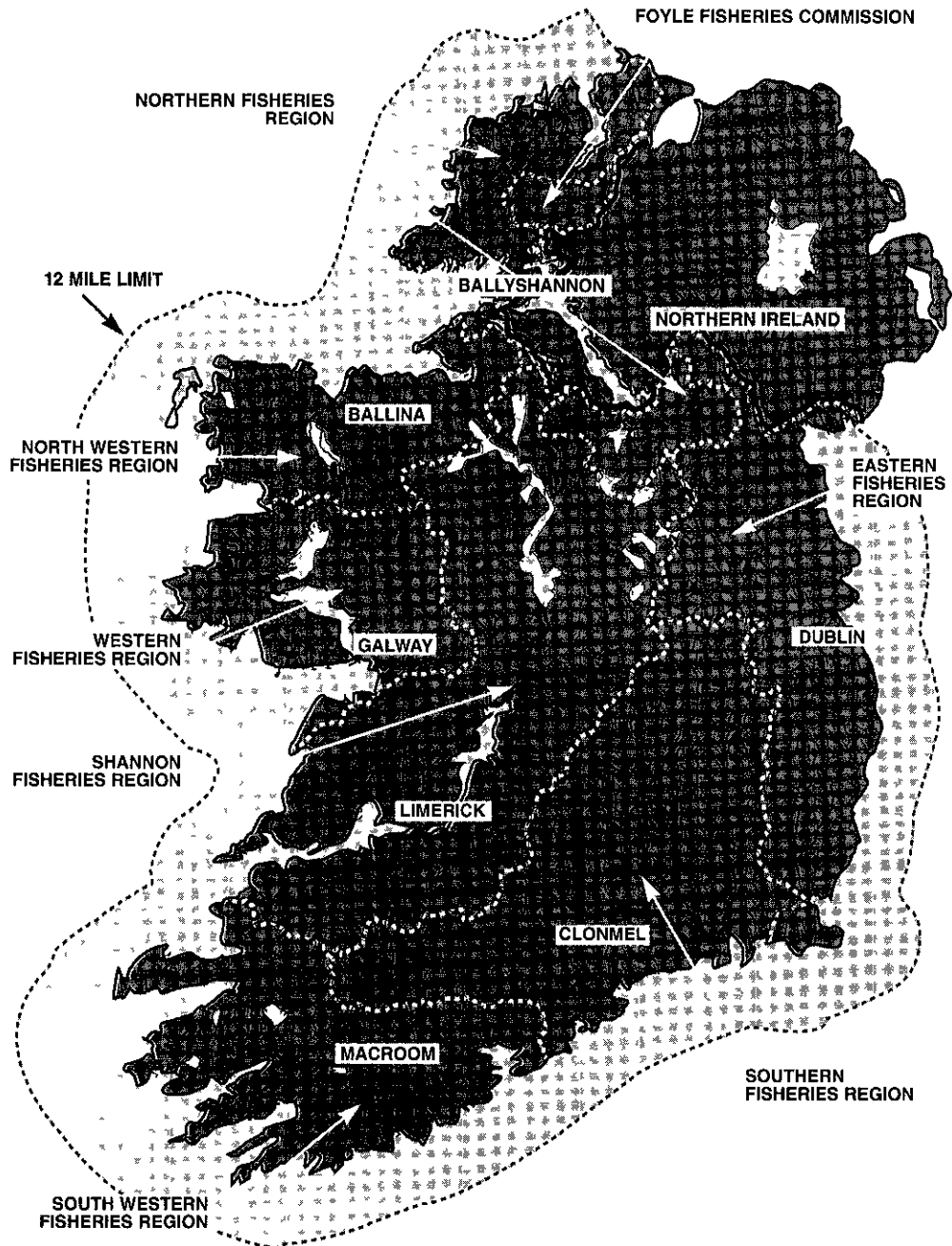
- 5 18 While co-operation takes place between the Department, the Fisheries Boards, the Department of the Environment, the EPA, the local authorities, the Department of Agriculture and Food and Teagasc, an overall strategy to overcome increasing slight and moderate pollution has not yet emerged.
- 5 19 High level and expert consultation among all of the organisations concerned with water quality will be required to reverse the current trend of increasing slight and moderate pollution. Such consultation should include
- agreement regarding the standard of water quality required in all waters, including small rivers and streams
 - education
 - comprehensive and co-ordinated monitoring and enforcement arrangements.

Appendices



Appendix A

Map of Fisheries Regions



Appendix B

Expenditure by Regional Fisheries Boards in 1995

	WRFB	SWRFB	SRFB	ShRFB	NWRFB	NRFB	ERFB
IR£000's Spend							
Protection	582	634	548	325	569	565	565
Development	567	106	149	723	486	522	219
Pollution	61	70	120	42	42	87	104
Admin & Pensions	321	364	179	325	291	275	265
Total	1,531	1,174	996	1,415	1,388	1,449	1,153
% Spend							
Protection	38	54	55	23	41	39	49
Development	37	9	15	51	35	36	19
Pollution	4	6	12	3	3	6	9
Admin & Pensions	21	31	18	23	21	19	23

Appendix C

Consultants' Findings

Consultants' Report on Central Fisheries Board Structures and Operations

In 1994, the CFB engaged Coopers and Lybrand to review its structures and operations. The consultants found the following CFB strengths

- it was responsible for a valuable national resource
- it had a good working relationship with Government departments and outside agencies
- there was a strong Chairman and a proactive Board
- it had a supportive input by the Department at Board level
- it had a reservoir of technical expertise
- it had committed management and staff.

The consultants found the following weaknesses

- there was no national policy on inland fisheries
- the legislation was not clear
- there was a confused overall role for the CFB
- it was operations driven with no strategic view taken by management
- there were no strategic management skills
- the RFBs were 'Independent Republics'
- there was fragmented policy interpretation and implementation
- there were little funds for significant development
- there were ownership issues
- the protection function had a low perceived public status
- the conservation function had a low perceived public status
- the public profile of the CFB was low
- public awareness/appreciation of value of this national resource was low
- the national fisheries research function was diffused (Fisheries Research Centre/ Salmon Research Agency, the Department, Marine Institute, CFB)
- there was an inadequate management structure/skills inventory
- historical baggage was a handicap
- there were no measures of success.

(Paragraph 2.25 refers to the consultants' recommendations.)

Consultant's Report on the Fisheries Act, 1980

In 1996, the CFB engaged a legal consultant to assist in drafting a discussion document on the interpretation of the 1980 Fisheries Act. In this document the roles of the CFB and the RFBs were summarised as follows

The CFB acts as the co-ordinating/directing body, with other powers (to carry out research, acquire fisheries etc) and as such it is the main instrument of the Minister. It is given explicit obligations in the major areas of Development Programming, Staff Schemes and Superannuation Schemes; estimates, grant payments and borrowing powers; annual accounts and reports; recommendations/ advice to Minister on various matters; acquisition and ownership of fisheries. The CFB is also constituted as the instrument for transmitting directions given by the Minister, and ensuring they are carried into effect. While it is open to the Minister and the RFBs to communicate directly, it is difficult to see how this can be done without disregarding the CFB's functions. By virtue of several provisions in the Act, control of the CFB rests with the Minister.

The RFBs have distinct functions, notably the protection of fisheries, general enforcement of Fisheries Acts; promotion and development of angling, the issue of licences and collection of rates (but all subject to CFB co-ordination/direction).

A number of functions are common to both the CFB and the RFBs or shared between them: preparation and implementation of development programmes, provision of certain services, fishery improvement, management etc. of fisheries owned or occupied by a Board but again all subject to co-ordination/direction of the CFB.

Consultants' Report on the Organisation and Management Structure of the Fishery Services

A reappraisal of the organisation and management structure of all fishery services was completed for the Department by Price Waterhouse in July 1996. With regard to inland fisheries it recommended that

- The role of the Department should be strengthened in relation to policy development, policy analysis and programme evaluation.
- Government policy on inland fisheries should be communicated via the CFB.

- A system should be developed such that the CFB is charged with the responsibility for developing national plans, agreeing priorities and reviewing them in accordance with Government policy for the functions involved on inland fisheries in consultation with the RFBs. In order to achieve satisfactory arrangements in this regard, the CFB would need to have a deciding/approval role in relation to RFB plans.
- The CFB role would need to include specific authority to approve the budgets and spending plans of the RFBs, to specify the financial controls required and to carry out such reviews and/or internal audits as are necessary to ensure adherence to expenditure guidelines and controls within an agreed system of accountability and performance measurement.
- The composition of the CFB would need to change. The preferred option would be a small Board, comprising persons with knowledge/expertise in inland fisheries and appointed by the Minister for the Marine
- The composition of the RFBs would need to be changed in order to ensure adequate representation of all interests. The current electoral arrangements, therefore, should be reviewed. The RFBs need to be more representative of local business interests, local authorities, tourism and local development groups
- The managers of the RFBs, while continuing to be employed by them, should have specific statutory powers and functions on which they would be accountable to the CFB specifically in the areas of compliance with laid down financial procedures, the employment and conditions of service of staff, the deployment of staff and disciplinary and industrial relations matters
- The powers and functions of the RFBs should be specifically focused on the granting of angling licences at local level and on the management of local river systems and fisheries within national policy guidelines.
- The CFB should have powers to direct, as and when necessary, the deployment of staff to deal with national priorities, particularly as regards protection programmes as agreed through the national planning process. The terms and conditions of staff employed by the RFBs should be reviewed accordingly.
- The management structures and staffing of the CFB will need to be strengthened to accommodate the new arrangements proposed.

- The Department should strengthen its overseeing and monitoring role by ensuring that the plans by the CFB and the RFBs are developed in line with Government policy and through ensuring that information flows exist to enable planned implementation and expenditure to be monitored and controlled.
- The direct management by the CFB of fish farms and fisheries should be discontinued.

Appendix D

Protection Outputs by Regional Fisheries Boards

	1991	1992	1993	1994	1995	Annual average
(a) Prosecutions						
WRFB	18	25	26	25	30	25
SWRFB	104	53	45	52	26	56
SRFB	63	77	65	78	42	65
ShRFB	26	79	76	32	39	50
NWRFB	82	64	43	23	31	49
NRFB	17	34	35	27	38	30
ERFB	59	57	54	57	57	57
Total	369	389	344	294	263	332

(b) Net seizures (yards)						
WRFB	2,800	12,300	5,400	7,000	7,700	7,000
SWRFB	11,300	26,800	26,500	25,000	40,300	26,000
SRFB	14,000	13,100	4,900	4,500	16,500	10,600
ShRFB	4,000	5,800	10,600	14,500	5,000	8,000
NWRFB	7,500	20,100	10,800	11,000	19,800	13,800
NRFB	25,000	24,400	30,600	7,200	15,600	20,600
ERFB	5,700	5,100	4,600	5,600	5,600	5,300
Total	70,300	107,600	93,400	74,800	110,500	91,300

Appendix E

Prosecutions for Water Pollution initiated by RFBs and Local Authorities in 1995 analysed by county

Number of prosecutions			Number of prosecutions		
	RFBs	Local authorities		RFBs	Local authorities
Carlow	0	0	Longford	0	0
Cavan	16	0	Louth	1	0
Clare	2	6	Mayo	2	0
Cork	11	4	Meath	5	9
Donegal	0	2	Monaghan	11	4
Dublin	1	3	Offaly	1	1
Galway	4	0	Roscommon	4	0
Kerry	6	5	Sligo	3	0
Kildare	0	3	Tipperary	0	1
Kilkenny	0	0	Waterford	0	1
Laois	0	0	Westmeath	1	0
Leitrim	0	0	Wexford	1	0
Limerick	0	3	Wicklow	2	0
Totals				71	42

Sources The CFB and Environment Bulletins, Department of the Environment