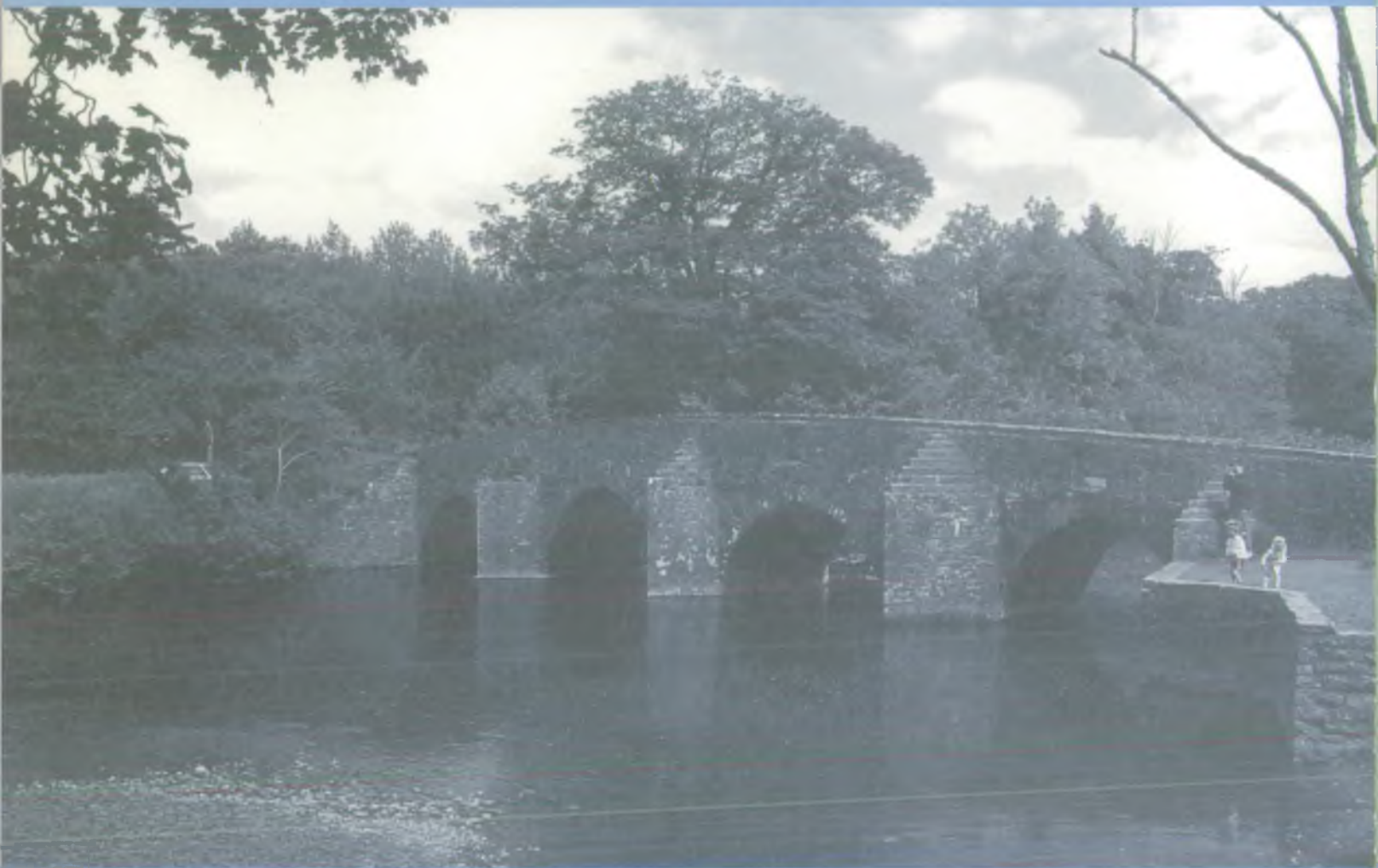


# THE RIVER OGMORE CATCHMENT MANAGEMENT PLAN ACTION PLAN 1996



## KEY DETAILS

### GENERAL

<i>Area</i>	272 km <sup>2</sup>
<i>Population (1991 Census)</i>	139,000
<i>Population Density</i>	511 per km <sup>2</sup>

### TOPOGRAPHY

<i>Ground Levels</i>	Max height	568 m AOD
<i>Sea Levels (Porthcawl)</i>	Mean High Water Springs	7.1 m AOD
	Mean Low Water Springs	-3.9 m AOD

### WATER QUALITY

<i>Length of Classified River in 1994</i>	Class A	86.4 km	Class D	3.2 km
<i>General Quality Assessment (GQA)</i>	Class B	38.3 km	Class E	none
	Class C	1.3 km	Class F	none

<i>Ogmore Estuary (1990 Survey):</i>	Class A	2.6 km
<i>Designated under EC Freshwater Fisheries Directive (78/659/EEC)</i>	Salmonid	34.7 km

### WATER RESOURCES

<i>Annual Average Rainfall</i>	1710 mm
<i>Primary Gauging Stations</i>	Ogmore at Bridgend and Brynmenyn Ewenny at Keepers Lodge Llynfi at Coytrahen

### FLOOD DEFENCE

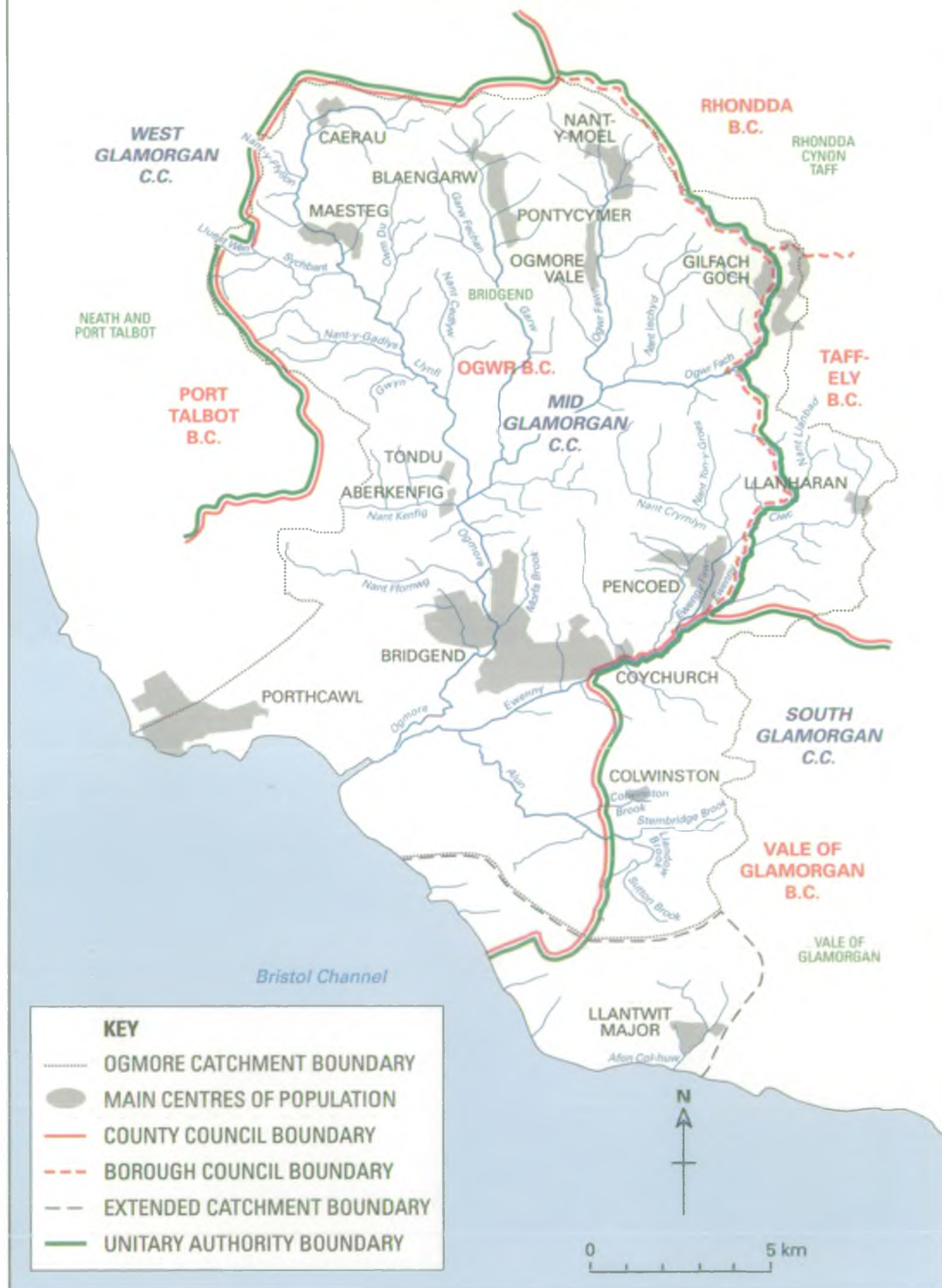
<i>Length of Designated Main River</i>	113.5 km
<i>Length of River on which Flood Alleviation/Drainage Schemes implemented</i>	13.5 km
<i>Length of River covered by a Flood Warning Scheme</i>	23 km

### FISHERIES

<i>Average Annual Declared Catches Rods (10 Year Average 1982-1991)</i>	Salmon 19	Sea trout 470
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## THE OGMORE CATCHMENT





## OUR VISION FOR THE OGMORE CATCHMENT

The Ogmore catchment is one of the most densely populated in Wales. Land use within the catchment can be divided into three main categories: forestry in the uppermost parts, industry in the central area, and agriculture along the coastal strip. Industrial activity in the central part of the catchment has left a legacy of huge tips of coal waste, some of which are currently being reclaimed. The land use demands by the growing population and modern industry have led to development in areas liable to flood, particularly around Bridgend where large flood defence schemes have been constructed. The catchment is well served by riverside walks and cycleways together with country parks, woods, castles and the Heritage Coast.

During the life of this Plan, we wish to see significant progress in:

- **improving water quality** - the most obvious and widespread form of pollution in the catchment relates to the presence of litter, especially in the upper urbanised reaches. Significant improvements are expected as a result of large scale investment into the sewerage and sewage treatment infrastructure of these rivers. Further improvements are expected with the completion of major land reclamation schemes which are landscaping spoil heaps and mineworkings left behind from the once widespread coal industry. Continued pollution prevention campaigns targeted at major industrial estates are expected to result in a reduction in the number of pollution incidents associated with these sites, which pose a threat to the rivers and to the drinking water abstraction at Schwyll in the lower Ewenny catchment.
- **continued restoration of salmonid fish stocks** - a major restocking programme is nearing completion following a substantial fish kill on the Llynfi and Ogmore in 1987. However fish stocks are still sub-optimal and are at risk from intermittent pollution and habitat degradation. Pollution prevention campaigns and a continued robust stance on developments will help to reduce this risk and

collaborative opportunities will also be sought to improve degraded habitat and, where appropriate, remove obstructions to fish migration.

- **restoring the otter population** - the Ogmore has been identified as a priority catchment in the NRA's Otter Strategy. We will assess the current status of otters in the catchment and develop and implement a plan to aid the recovery of the otter population
- **protecting river corridors and floodplains** - the concept of "buffer zones" alongside watercourses needs to be developed, in rural and urban areas, to encourage the formation of natural river corridor habitats where waterside flora and fauna can thrive. Wherever possible, new development should be directed away from floodplains, unless appropriate flood defence works are in place or alleviation works form part of the proposal.
- **developing an abstraction licensing policy** - abstraction uses must be balanced against the environmental needs of the river system, and we propose to implement an objective methodology for assessing the state of the catchment in water quantity terms. Where this balance is not being achieved we intend to implement any cost-effective schemes that will redress the situation.

The realisation of our vision, which we expect to take forward into the Environment Agency in April 1996, will be achieved through a balanced management approach to all activities. We will encourage imaginative proposals to allow sustainable economic and community development to proceed whilst ensuring protection and improvement of the water environment. We will collaborate actively with all users of the catchment and all those statutory bodies that can contribute to the achievement of this vision.

D.G. WALKER  
AREA MANAGER - SOUTH WEST WALES

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## INTRODUCTION

### THE CONCEPT OF CATCHMENT MANAGEMENT PLANNING

The rivers, lakes, estuaries and coastal waters of England and Wales have never before been subject to such large and rapidly increasing demands from the users of water. Many different uses interact, or compete for water or water space, and will inevitably come into conflict with one another. The National Rivers Authority (NRA) is the major manager of the water environment in England and Wales and aims to harmonise conflicts between competing water uses. Our Mission Statement expresses the following principles:

"We will protect and improve the water environment by the effective management of water resources and by substantial reductions in pollution. We will aim to provide effective defence for people and property against flooding from rivers and the sea. In discharging our duties we will operate openly and balance the interests of all who benefit from and use rivers, groundwaters, estuaries and coastal waters. We will be businesslike, efficient and caring towards our employees".

We have chosen to use Catchment Management Plans (CMPs) to translate these principles into action. The plans describe our vision for each catchment, identify problems and issues and propose

actions that may be taken to resolve them. The plans also provide the means of promoting two key aspects of environmental management - land use planning and water quality objectives.

### THE RELATIONSHIP BETWEEN LAND USE PLANNING AND CATCHMENT MANAGEMENT PLANNING

The broad objectives of catchment management planning are to conserve and enhance the total river environment through effective land and resource management. However, while we are well placed to influence some of the factors affecting the water environment, particularly in relation to the river corridor itself, we have very little control over the mechanisms which determine land use change on a catchment-wide basis. This is largely the responsibility of local planning authorities through the implementation of the Town and Country Planning Acts. However, we are a statutory consultee under this legislation.

The policies in statutory development plans are important in this regard in that they set out the framework for land use change, and provide the key reference in determining development applications; we encourage the inclusion of policies which reflect our concerns and responsibilities.

As guidance for local authorities, we have prepared a set of statements relating to the broad headings of





*River Ewenny at Ogmores Castle*

water quality and water resources, flood defence, fisheries, conservation, recreation and mineral workings and waste disposal. These statements are summarised in our "Guidance Notes for Local Planning Authorities on the Methods of Protecting the Water Environment through Development Plans"

This CMP Action Plan sets out Issues and Actions specific to the Ogmores catchment which have been agreed within the framework of these Guidance Notes. This plan also outlines how the concerns of the water environment should influence the location and nature of development and land use change within the catchment.

The first phase of the second Dŵr Cymru Welsh Water Asset Management Plan (AMP2) for the period 1995 to 2000 is currently being finalised. The phased programme of improvements to sewerage infrastructure

and sewage treatment works identified within AMP2 will determine the pace of future remedial measures. This will have an important effect on both improvements in water quality and development/planning control as indicated within the Actions identified within this plan.

## WATER QUALITY OBJECTIVES

The Statutory Water Quality Objectives (SWQO) scheme, introduced under the Water Resources Act 1991, is a new system for water quality planning which places water quality targets on a statutory footing. The scheme is based upon the recognised uses to which a river stretch may be put and is consistent with the principles of CMPs. These uses will include River Ecosystem, Special Ecosystem, Abstraction for Potable Supply, Agricultural/Industrial Abstraction and Watersports.

At present, only the standards for the River Ecosystem Use have been developed on a formal basis and, as a result, this is the first SWQO Use to be introduced by the Government through The Surface Waters (River Ecosystem) (Classification) Regulations 1994.

In the Ogmores CMP Support Document, a River Ecosystem Use class target has been proposed for each classified stretch of river. These targets represent our long term vision for the quality of a particular reach of river, and are known as Long Term River Quality Objectives (LTRQOs). Where it may not be possible to achieve this target within the life of this Action Plan, we have set interim targets to ensure progress is made towards the long term vision.

This Action Plan identifies, where appropriate, the actions required to achieve these targets. At present, these targets will only be applied informally although it is hoped that, in the near future, they will be established as Statutory WQOs by the Secretaries of State for the Environment and Welsh Office.

## REVIEW OF THE CONSULTATION PROCESS

We published the Draft Ogmores Catchment Management Plan (CMP) in February 1992, following more than a year of preparation. The report sought comments from all those interested in the water environment within the catchment. Representatives of the various key organisations attended the public launch in Bridgend on 11th February 1992, and a press release was sent to local newspapers to raise awareness of the CMP and the consultation period.

Subsequently a display was placed in local libraries and council offices.

The official consultation period ran from the public launch through to 30 April 1992, although several organisations provided written comments after this period. A total of 20 written responses were received from the following organisations:

Friends of the Earth  
 British Coal Opencast  
 Campaign for the Protection of Rural Wales  
 Merthyr Mawr Community Council  
 Welsh Federation of Coarse Anglers  
 St.Brides Major Community Council  
 Glamorgan Heritage Coast  
 Ogwr Groundwork Trust  
 Llangynwyd Middle Community Council  
 Welsh Development Agency  
 Royal Society for the Protection of Birds  
 Keep Wales Tidy  
 South Wales Constabulary  
 Vale of Glamorgan Borough Council  
 Ogwr Borough Council  
 Mid-Glamorgan County Council  
 Coity Higher Community Council  
 Dŵr Cymru Welsh Water  
 United World College of the Atlantic

All of the comments received were taken into account when formulating this Action Plan for the Ogmore catchment.

Whilst the Welsh Region of the NRA and its predecessor organisation (the Welsh Water Authority) had produced various river management plans in the 1980s, the Draft Ogmore CMP was the first plan of its kind to be developed by the Region, involving a full-scale public consultation programme. Since then, published Catchment Management Plans have been adopted nationally by the NRA as the means to promote its vision and management proposals. New ideas and changing circumstances have influenced the format and content of CMPs in the intervening period and further refinement has taken place.

There has been a considerable delay between the launch of the draft Ogmore CMP and publication of this Action Plan, although the Region has been using a working draft in the intervening period to progress key issues. An updated review of the catchment, in the form of a Support Document, underpins this Action Plan and, although this will not be published, a limited number will be provided to statutory and voluntary organisations, for reference purposes.

## AN OVERVIEW OF THE OGMORE CATCHMENT

### GENERAL

The Ogmore Catchment is situated in South Wales, draining an area of some 272 km<sup>2</sup> and discharging to the Bristol Channel 32 km west of Cardiff. Between the Ogmore and river Thaw catchments lies a small area draining directly to the Bristol Channel, and includes the Afon Col - Huw which passes through Llantwit Major. This area is not included in this Action Plan, but will be looked at during the first review stage.

Land use within the Ogmore catchment can be partitioned into three main categories: forestry in the uppermost parts of the catchment, industry in a large central area, and lowland livestock farming in the coastal strip. Taken as a whole, however, the area forms one of the most densely populated catchments in Wales, with a population of 139,000 in the area (511/km<sup>2</sup>). The current migration trends suggest that the population could increase by around 16% by the year 2001.

Apart from the effects of urbanisation and agricultural practices, the landscape of the lower catchment has

remained relatively unchanged. However, the upper catchment has been extensively altered by mining activities, both past and present. Legacies of the mining era include the huge tips of coal waste. Initiatives are now underway to remove these spoil heaps and landscape the areas. Unfortunately these reclamation schemes, whilst in progress, tend to impinge on the improvements seen in the riverine environment although the long term effects are likely to be beneficial from both an aesthetic and ecological viewpoint.

The main rail and road links (M4) pass in an east-west direction across the catchment, on the low-lying coastal belt. Trunk roads serve each of the major sub-catchments, diverging as they follow the valleys to the upland areas. Improved communications within the area, and in particular development of the M4 corridor, have contributed to the recent growth of both population and industry.

### FLOOD DEFENCE

Our flood defence interest in the catchment relates primarily to the provision and maintenance of flood





*Flood defence works in the Ogmere near Bridgend Leisure Centre*

alleviation schemes and the control of development to ensure that flooding problems are not created or made worse. During the 1960's, widespread flooding occurred within the catchment, particularly in Bridgend, and extensive damage resulted.

The need to protect residential and industrial areas on low-lying land has required comprehensive flood alleviation schemes at various locations. Schemes have been constructed in the areas of Bridgend, Aberkenfig, Treoes, Coychurch and Ewenny village. Those in Bridgend, the main town in the catchment, are notable in terms of their scale and visual impact.

There are still risks of tidal inundation at Newton and Porthcawl, and on land in the lower reaches of the Ogmere and Ewenny. The total area still at risk from flooding is approximately 12.5km<sup>2</sup>.

## WATER RESOURCES

The main source of potable water within the catchment is the spring at Schwyll. There is a shortfall in supply from within the catchment and the balance is made up by water piped from the Tywi catchment via Felindre. Future increased demand will also be met from outside the catchment as the number of small potable sources is reduced.

Relatively small quantities of water are abstracted for general agricultural, amenity and spray irrigation purposes from both surface and groundwater sources. The decline in the coal industry has resulted in a reduction in industrial abstractors, with Jamont Paper Mills remaining as the only abstractor in this category, other industries being supplied by mains water.

## WATER QUALITY

Water quality in the main freshwater watercourses is generally high, 96.5% of classified reaches were within Classes A and B in the 1994 River Quality Survey.

The river system is in the process of recovering from long term chronic pollution. This improvement, which has accelerated in the last fifteen years, is the result of the demise of certain polluting industries - notably coal - and the implementation of stringent pollution control measures throughout the catchment. Nevertheless, industrial pollution incidents continue to occur and one, in December 1987, caused a major fish kill in the rivers Llynfi and Ogmere.

Several industrial estates cause intermittent problems with contaminated surface water discharges. Containment problems associated with farm effluent have resulted in pollution problems of the Alun and Nant Fforwg. The coal industry has several discharges of effluent in the catchment, including run-off from land reclamation schemes, as well as discharges of abandoned minewaters.

Two major sewage treatment works, Lletty Brongu (Maesteg) and Penybont, discharge effluent into the catchment, together with a discharge of industrial effluent from Jamont Paper Mill. Trunk sewerage systems along the river valleys are generally in a poor state of repair, and gross infiltration of water into the sewers has led to premature operation of overflows. The discharge from Lletty Brongu sewage treatment works has a pronounced impact on the water quality of the Llynfi.

## FISHERIES

Gradual improvements in the game fishery have occurred in the catchment in line with improvements in water quality. The Ogmere and its tributaries support a fishery consisting mainly of brown trout and sea trout, although salmon are increasing in number. In 1987 a major pollution incident caused a massive fish mortality over a 14km reach of the Llynfi and lower Ogmere. Following this incident the Llynfi/Ogmere Restoration Group was established in order to oversee the expenditure of compensation



*Litter on the Ogur Fawr*



monies received from the polluters.

As part of the restoration programme, over 200,000 microtagged juvenile salmon and sea trout have been stocked into the catchment. Survey work in 1992 indicated that the distribution of juvenile salmon has increased by 33% by comparison with the previous survey in 1989. "Excellent" populations of juvenile trout were found in the Garw Fechan and Nant Iechyd although deterioration in populations was recorded in the lower Garw and Llynfi, both of which were affected by major land reclamation schemes.

The Ewenny was restocked with grayling during 1994 following an absence of approximately 30 years. The Ogmore is a spate river which does not provide suitable habitat for coarse fish. However, a small number of still waters provide limited sport for coarse fishermen.

### CONSERVATION

The Ogmore catchment contains 16 Sites of Special Scientific Interest of which 10 include aquatic habitats or are susceptible to drainage. Most of the surrounding



*An Otter*

coastline is designated as Heritage Coast, whilst the limestone heath at Old Castle Down is considered to be of national importance.

- Various parts of the catchment have been invaded by Himalayan Balsam, and more extensively by Japanese Knotweed. Evidence of otter activity has been seen in the middle and lower reaches of the Ogmore and Ewenny. Kingfishers and sandmartins breed in suitable habitats within the catchment, although the natural riparian habitat has been reduced due to flood protection works.

### RECREATION

The catchment contains country parks, woods, castles and the Heritage Coast. There are many riverside walks and an extensive network of cycleways, linking the many towns and villages, has been constructed and is currently being expanded under the auspices of Groundwork Ogwr.

Coastal bathing and water sports occur at Porthcawl and at the EC Designated bathing beaches of Trecco and Sandy Bay. Apart from angling, little or no water based activities occur on the rivers.

River angling is dominated by brown trout in the early season and by salmon and principally sea trout later in the year. There are also opportunities to fish for coarse species, though these tend to be limited to lakes such as Pwll-y-Waun, Wilderness Pond and Treos Lake. Angling rights are owned or leased by four principal clubs: Ogmore Angling Association, Llynfi Valley Angling Association, Ogwr Borough Angling Association and Pencoed and District Angling Association.

## THE INTERACTION BETWEEN LAND USE AND THE WATER ENVIRONMENT

### INTRODUCTION

Man's use of land, whether for residential, farming, industry, amenity or infrastructure developments, is likely to impact on the water environment, either directly or indirectly. This Action Plan aims to address existing problems, seek general environmental improvement and protect the catchment from future damage.

The Ogmore drains a mixed catchment which can be split into three main categories: forestry in the upper reaches, industry in the large central area and livestock

farming in the coastal strip. The catchment is densely populated, with the main centres being Bridgend, Maesteg and Porthcawl. The catchment has a high conservation value, containing 16 Sites of Special Scientific Interest and two sections of Heritage Coast, as well as a number of tourist attractions associated with water. Issues of particular concern to us include:

- the risks associated with developing in floodplains
- the need to protect major aquifer/potable water abstractions

- the deficiencies in infrastructure, particularly sewerage
- the need to ensure continued improvement to the river environment
- the need to upgrade and maintain agricultural waste storage systems
- the risks associated with acid mine discharges

Our stance on all new development is that it is the responsibility of developers to assess the impact of their proposals on the water environment, and provide suitable mitigation works where necessary. In order to ensure that the right issues are addressed, and the relevant consents applied for, the developer must consult with us at the earliest opportunity.

## INFRASTRUCTURE

**Surface Water Drainage Systems.** New developments can result in increases in the rate of surface water run-off, which may exacerbate existing flooding problems. In such instances, we would require suitable restrictions on the rate of discharge of surface water to mitigate any possible impacts.

Clean surface water and foul water systems must be suitably routed and kept separate wherever possible to reduce the risk of pollution. We would wish to see clear identification of foul and surface water drainage systems to assist in preventing mis-connections, and we will be liaising with Local Authorities to achieve this.



*River Ewenny near the A48*



*Pen-y-Bont Sewage Treatment Works*

**Sewerage.** It is clearly important that, wherever new development or redevelopment is proposed, the local authorities and Dŵr Cymru Welsh Water (DCWW) ensure that adequate and suitable drainage and treatment systems are available. In particular, problems have been identified with Lletty Brongu sewage treatment works which serves Maesteg, and combined sewer overflows from the Llynfi Valley sewerage system. These are presently being discussed with DCWW with a view to major improvement schemes proceeding within their AMP2 investment programme between 1995 and 2000. Any of the smaller settlements which are currently not served by public sewerage systems are drained to private facilities. Such installations are required to comply with BS 6297, current Building Regulations and relevant NRA policy.

**Transport.** The catchment is crossed by the M4 motorway, a Euroroute linking London with Fishguard. In addition there is a major road network serving a highly populated catchment. Parts of this network are continually being upgraded by the Welsh Office and schemes are programmed over several years. It is important that all road improvements are undertaken in an environmentally sympathetic manner so as to protect water quality, the landscape and the flora and fauna within the river corridor, and to ensure flooding problems are not created or exacerbated.

The main railway link is the Intercity line between London and Swansea, which continues westward to Fishguard and links with the ferry route to the Irish Republic.

## DEVELOPMENT IN FLOOD RISK AREAS

Development situated within a floodplain is generally at risk from flooding, and we are obliged to advise the local planning authorities, in accordance with Welsh Office circular 68/92, on flood risk. Commencing in 1995, we will be undertaking major surveys of all river catchments, on a phased basis and with the agreement





*River Ogmore upstream of Bridgend Leisure Centre*

of the local authorities. These will identify more accurately the extent of the floodplain and the impact of development on flood risk throughout the catchment. This work will take several years to complete and will concentrate initially on those areas where development and flooding are seen as major issues.

Development may affect rivers and flood defences directly, or affect the risk of flooding. It is Government policy that new development on the floodplain should make provision for flood defence. Where alleviation works are possible, the onus is on the developer to investigate the flood risk, and design and submit amendments to his planning application. This must show how any unacceptable flood risk arising from the proposed development will be mitigated or alleviated, in a manner which is environmentally acceptable. In view of the complex and lengthy discussions that may ensue, developers should consult with us prior to making an application.

Within the catchment flooding problems have been extensive. However, several flood alleviation schemes have been constructed at Bridgend, Aberkenfig, Treoes, Coychurch, Pencoed and Ewenny Village.

Major flooding problems still remain at Pencoed and Blackmill, although consideration is being given to whether or not flood protection standards can be improved. Along the coast, parts of Newtown and Porthcawl are at risk from tidal flooding. Such property at Newtown is protected to an appropriate standard by both formal and informal defences while consideration is also being given to promoting coastal improvement works at Porthcawl.

## CONTAMINATED LAND

When promoting redevelopment plans, developers need to be mindful of any past use of a site which may have caused contamination. It is always the developers responsibility to assess the problem and implement appropriate remedial works in close consultation with us, prior to any work commencing on site.

## GROUNDWATER

The preservation of groundwater quality and quantity is one of our major objectives and we have produced a document "Policy and Practice for the Protection of Groundwater", which provides advice on the management and protection of groundwater on a sustainable basis. This policy deals with the concept of vulnerability and risk to groundwater from a range of human activities. The major source of potable supply within the catchment is at Schwyll from the carboniferous limestone aquifer. There are also several other sources using this aquifer and developers will need to be aware of these Groundwater Protection Zones. We will look to the planning authorities to have regard to the protection of groundwater, where it exists, as a material consideration in the determination of planning applications.

## RIVER CORRIDORS

**Buffer Zones.** River corridors provide important interconnections between habitats and are used extensively by wildlife. Where possible, we would wish to see buffer zones created along watercourses, in both rural and urban areas, to help protect the water environment from the impact of potentially damaging activities on adjacent land, and to provide access along the watercourses for river maintenance works. These zones would have to be fenced where livestock are present, to avoid damage to river banks which could lead to channel instability, increased flood risk and a reduction in fisheries and conservation value.

**Culverts, River Diversions and Wetlands.** The construction of culverts to direct and convey watercourses must have our consent. Whilst the installation of culverts, of suitable dimensions, for river crossings is generally an acceptable practice, we do not support the widespread use of culverts to enable a change in land use - this would be contrary to our conservation duties. In particular, the practice of culverting streams in order to use their valleys as landfill sites, and the infilling of wetlands, is generally unacceptable. Similarly, we generally oppose the diversion of established watercourses in order to permit development, and would wish the original natural course to be retained as a feature, wherever possible.

## AGRICULTURE

A proportion of the catchment is farmland with mixed low intensity farming particularly prominent. The lack of adequate investment in effluent management facilities occasionally causes problems. The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 have set minimum standards of

construction for new or substantially altered systems. We are using these Regulations, and our well established contacts with farming organisations, to secure more effective, long term solutions.

Activities associated with arable farming, including the use of pesticides, is of particular concern in the Vale of Glamorgan area which overlies the limestone aquifer feeding the Schwyll Pumping Station. This supplies drinking water in the catchment and is sensitive to contamination over a wide geographical area. We will agree pollution prevention measures in order to reduce any risk in line with our Groundwater Protection Policy.

Afforestation is present in the upper reaches of the catchment, Where further plantings are proposed then we will consider in detail, on a case by case basis, any risk to water quality, increase in sedimentation or

effects on landscape and conservation interests they may pose. The Forests and Water Guidelines lay down standards for best practice designed to minimise the impact of forest management on the water environment.

#### **BARRAGES, MARINAS AND TIDAL WEIRS**

This type of development, which is usually proposed to improve amenity and recreational value, can cause a variety of problems. These may include flooding, a deterioration in water quality - sometimes leading to odours and toxic algal blooms - and obstruction to movement of migrating fish. Since future problems are often difficult to predict for such developments, we will look to the planning authorities to adopt a robust precautionary approach when considering any new proposals.

### **ISSUES AND ACTIONS**

The following section outlines the actions that have been agreed in order to tackle the issues identified within the Draft Ogmore CMP. The organisation(s) responsible for implementing the actions, the costs involved, and the agreed timescales within which the actions are to be undertaken are shown. Actions are only included where they have been agreed by the body responsible for undertaking the work/investment. Where an action is subject to constraint or is awaiting approval, this is made clear within the action table.

The Action Plan covers the period up to the end of 1999. Where Issues are unlikely to be resolved within this timescale, this is indicated clearly within the tables. CMPs should be seen to be continually evolving, and therefore if priorities change or new opportunities for improvements present themselves, they will be reflected in future reviews of the plan.

In 1994, subsequent to the production of the Draft Ogmore CMP, the Government introduced regulations for the implementation of a new Water Quality Classification Scheme called River Ecosystem (RE). Consequently, the data used for the Draft Ogmore CMP have been re-examined to reflect the new scheme and some of the actions proposed may have changed as a result. The benefit of this statistically more rigorous examination is that we can be even

more confident that the money we spend to resolve issues, or ask others to spend, will lead to a significant improvement in water quality.

Within the costs column of the Action tables care has been taken to identify to whom the predicted costs apply. Where there is a lone responsibility, the costs will be borne by that organisation/interest. Where responsibility is shared (lead or other), but the costs are only available for our input to that Action, this is clarified by "NRA costs". Where responsibility is shared but the costs will only be incurred by one organisation/interest, this is shown by, for example, "NRA costs only".

In the Draft Ogmore CMP, 22 issues were identified where targets were not being met. These issues were presented, together with various management options, for discussion as part of the consultation process. All of the responses received from external interests have been considered, and where necessary further discussions have been held to resolve issues and to agree appropriate, realistic and affordable actions.

Since publication of the Draft Ogmore CMP, 8 of the 22 original issues have been resolved. Updates for these issues, together with those for other issues which have been progressed, are included with this publication for reference.



## CHANGES TO ISSUES FROM DRAFT OGMORE CMP

The following table summarises the original issues as detailed in the Draft Ogmores CMP. Whether or not these have been carried forward into the Action Plan is indicated, together with a list of those Issues for which updates are available. Three Issues have been added in the Action Plan by dividing 6.1 and 6.6 into extra issues.

ISSUE	Draft CMP Issue No.	Action Plan Issue No.	Issue Resolved	Update
Reducing BOD levels	6.1	1,3,5		
Reducing Ammonia levels	6.2		✓	✓
Reducing Suspended Solids levels	6.3		✓	✓
Reducing Metal concentrations	6.4		✓	✓
Improving Aesthetic Quality	6.5	8		✓
Managing Litter problems	6.6	14,32		
Surface Water Abstractions (Quality)	6.7		✓	✓
Coastal Water Quality	6.8		✓	✓
Groundwater Protection	6.9	13		
Water Temperature	6.10		✓	✓
Poor Biological Quality (Llynfi)	6.11		✓	✓
Low Fish Populations	6.12	29		✓
River Llynfi Abstraction	6.13	16		✓
Low Flows in Alun & Ewenny	6.14		✓	✓
Flood Alleviation	6.15	18		
Barriers to Salmonid Migration	6.16	24		✓
Habitat Improvement	6.17	23,25		✓
Silt Accumulation	6.18	26		
Control of Japanese Knotweed	6.19	27		
Tackling Poaching	6.20	30		✓
Improving Riverside Access	6.21	28		✓
Conflict between Users	6.22	1,3,5,23		

## NEW ISSUES IN OGMORE CMP ACTION PLAN

As a result of the consultation process, and the further mid term review of the catchment undertaken in 1994/95, 17 new issues have been identified, giving a total of 34. The new issues are summarised below. The derivation of these is presented in the Support Document, which underpins this plan.

SUMMARY OF ISSUE	Action Plan Issue No.
Poor Biological Quality of Strembridge Brook	2
Poor Biological Quality of Garw	4
Poor Biological Quality of Sychbant & Lluest Wen (Acidification)	6
Poor Biological Quality of Sutton Brook & Nant Ffornwg	7
Poor Biological Quality of Nant Crymlyn	9
Abandoned Mines	10
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## ISSUES AND ACTIONS

ISSUE 1									
Discharges from CSOs in the Llanharan area have caused the Ewenny Fach to fail the RE Class 1 target due to elevated BOD concentrations.									
ACTIONS	RESPONSIBILITY		COST (£s)	1995	1996	1997	1998	1999	FUTURE
	LEAD	OTHER							
a) Undertake necessary remedial work to ensure that CSOs operate according to design (action completed).	DCWW								
b) Survey to confirm that CSOs are operating in accordance with their design (action completed).	NRA								
c) Ensure standards of service are maintained by DCWW and their sewerage agents.	DCWW	NRA							Ongoing
ISSUE 2									
Low DO levels of the Stembridge Brook are causing a failure to meet its target for RE Class 2 and biological quality is poorer than would be expected.									
a) Programme of farm inspections to identify sources of agricultural pollution.	NRA		2.5k						
b) Instigate necessary remedial measures to improve water quality towards achievement of RE Class 2.	Farm Owners		Un-known						
ISSUE 3									
SEE UPDATE									
The Llynfi downstream of Lletty Brongu STW has failed its LTRQO RE Class 2 target due to elevated BOD concentrations. Poor Biological quality also exists in this stretch.									
a) Major improvement scheme for Lletty Brongu STW as part of AMP2 programme	DCWW	NRA	3 million						
ISSUE 4									
The Garw has poor biological quality and fails to achieve the RE Class 1 target due to elevated BOD concentrations, caused by the Blaengarw Land Reclamation Scheme and the antiquated sewerage system respectively.									
a) Continue pollution prevention liaison with site operators to minimise impact from land reclamation activities, and ensure consent compliance.	NRA	MGCC/ Contr-actors	10k (NRA)						
b) Undertake improvements to sewerage as part of above scheme.	MGCC/ Contr-actors		200k						

## ISSUES AND ACTIONS

### ISSUE 5

Failure to achieve the RE Class 1 target due to elevated BOD concentrations in the Ogmore and Morfa Brook in Bridgend.

ACTIONS	RESPONSIBILITY		COST £	1995	1996	1997	1998	1999	FUTURE
	LEAD	OTHER							
a) Complete improvements to CSOs in line with AMP 2 - timescales for individual or groups of CSOs to be defined by NRA/DCWW negotiations.	DCWW	NRA	4 million						By 2000
b) Investigate other sources of contamination and extent of BOD failures.	NRA		2k						
c) Agree remedial measures and timetable for implementation to secure improvements in BOD.	NRA	Site Owners	Un-known						

### ISSUE 6

Acidification of the Sychbant and Llest Wen resulting in poor biological quality.

a) Establish sources and extent of acidification and poor biological quality.	NRA		2k						
b) Liaise with Forest Enterprise to achieve improved management of river corridors through forested area, through application of Forest and Water Guidelines.	NRA	FE	0.5k NRA Cost p.a.						Ongoing
c) Continue to pursue and support initiatives to reduce emissions leading to acid deposition.	NRA/ HMIP/ Government/ Industry		Un-known						Ongoing


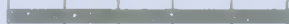



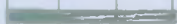
### ISSUE 7

Poor biological quality of the Sutton Brook and Nant Ffornwg.

a) Investigate sources and extent of poor biological quality.	NRA		4k						
b) Agree remedial measures and timetable for implementation to secure improvements in biological quality.	NRA	Site/ Farm Owners	Un-known						



## ISSUES AND ACTIONS

ISSUE 8 SEE UPDATE		Poor biological quality of the Llynfi in the Maesteg area caused by Caerau Land Reclamation Scheme and problematic CSOs.							
ACTIONS	RESPONSIBILITY		COST £	1995	1996	1997	1998	1999	FUTURE
	LEAD	OTHER							
a) Continue pollution prevention liaison with site operators to minimise impact from land reclamation scheme in its final stages.	NRA	MGCC/ Contr- actors	0.5k						
b) Complete improvements to CSOs in line with AMP2 - Timescales for individual or groups of CSOs to be defined by NRA/DCWW negotiation.	DCWW		3 million						By 2000
ISSUE 9		The Nant Crymlyn has poorer biology than would be expected from water quality.							
a) Establish and report causes and extent of poor biological quality.	NRA		1.5k						
b) Where necessary, agree remedial measures and timetable for implementation to secure improvements in biological quality.	NRA	Site Owners	Un- known						
ISSUE 10		Abandoned minewater discharges cause poor biological quality of the Nant Cedfyrw and localised aesthetic impact at other locations throughout the catchment.							
a) Undertake negotiations to secure funding for remedial actions in line with Regional and National Priorities.	NRA	WO/ WDA/ CA/ MGCC	1k						
b) Dependent on a) undertake remedial works to achieve improvements in biological quality and aesthetic appearance of Nant Cedfyrw downstream.	Depend- ent on a)		55k						Ongoing
c) Continue to maintain treatment system.	Depend- ent on a)		5k						Ongoing

## ISSUES AND ACTIONS

<b>ISSUE 11</b> Diffuse pollution arising from Bridgend Industrial Estate causes contamination of the River Ewenny with solvents. In addition large numbers of pollution incidents occur due to poor operational practices on the Industrial Estate.									
ACTIONS	RESPONSIBILITY		COST £	1995	1996	1997	1998	1999	FUTURE
	LEAD	OTHER							
a) Complete ongoing pollution prevention campaign at the Industrial Estate to identify sources of and risks of pollution.	NRA		1.5k	■	■				
b) Agree remedial measures and timetable for implementation to remove contamination and reduce risks of pollution incidents occurring.	NRA	Site Owners	Un-known	■	■	■			
<b>ISSUE 12</b> Premature operation of CSOs throughout the catchment give rise to water quality and aesthetic problems.									
a) Complete improvements to CSOs in line with AMP 2, for those CSOs or CSO groupings defined by negotiation between NRA/DCWW.	DCWW	NRA	7 million (Issue 5 a) & 8 b) combined)				■	■	By 2000
<b>ISSUE 13</b> Groundwater quality at the Schwyll potable abstraction is threatened by pollution incidents and diffuse sources of contamination.									
a) Continue to monitor and investigate sources of contamination.	NRA	DCWW	5k p.a.	■	■	■	■	■	Ongoing
b) Agree pollution prevention measures in line with NRA 'Groundwater Protection Policy', and incorporate suitable conditions on planning consents.	NRA	Site Owners Contr-actors LPA's	2.5k p.a.	■	■	■	■	■	Ongoing
c) Agree a code of conduct using best practices for the spreading of sludge to land in the Vale of Glamorgan.	WRA	NRA, Sludge producers, land-owners	2.5k p.a.	■	■	■	■	■	Ongoing

## ISSUES AND ACTIONS

<b>ISSUE 14</b> The rivers Llynfi and Ogmore are of poor aesthetic quality between Caerau and the estuary.									
ACTIONS	RESPONSIBILITY		COST £	1995	1996	1997	1998	1999	FUTURE
	LEAD	OTHER							
a) Complete improvements to CSOs and Lletty Brongu in line with AMP2 investment programme.	DCWW	NRA	7 million (Issue 5 a) & 8b) combined)						By 2000
b) Assess extent and sources of litter.	KWTC	NRA/ LPAs/ Industry							
c) Clear litter from river corridor.	KWTC								
d) Encourage local groups to take an interest and adopt a stretch of river.	NRA/ KWTC								
<b>ISSUE 15</b> A report during 1995 revealed moderately elevated levels of Polychlorinated Biphenyls (PCBs) and DDT in eels living in the Llynfi at Aberkenfig.									
a) Monitor biota in the lower Llynfi to detect any change in the level of contamination	NRA		1.5k						
b) Carry out a survey of biota and sediment in the river to establish if there is a current point source of the contamination, and to identify it.	NRA		4k						
c) If the source can be identified, investigate methods of preventing contamination of the river.	Land-owner	NRA	Un-known						
<b>ISSUE 16</b> The Llynfi fails to achieve its water quantity target downstream of the abstraction by Jamont Paper Mills.									
<b>SEE UPDATE</b>									
a) Identify and cost options to alleviate the flow problem on the Llynfi (action complete).	NRA		12k						
b) Assess the benefits of the various options identified.	NRA		2k						
c) If cost-effective solution found, implement remedial actions.	NRA	Jamont Paper Mills	c.170k						



## ISSUES AND ACTIONS

ISSUE 17 The flow regime of the Ewenny has altered.									
ACTIONS	RESPONSIBILITY		COST £	1995	1996	1997	1998	1999	FUTURE
	LEAD	OTHER							
a) Carry out a study of the factors influencing the regime and possible causes of change.	NRA		9k		■				
b) Develop strategy to manage future change.	NRA		1k			■			
ISSUE 18 Flood protection standards are not known at Pencoed, Blackmill and Nanffyllon.									
Establish current flood protection standards and identify improvement works where possible.	NRA		10k		■	■			
ISSUE 19 Costs of maintenance operations, particularly gravel removal and disposal, have increased significantly in recent years.									
Review existing maintenance regime and identify and implement improvements where possible.	NRA		6k		■	■			
ISSUE 20 Property at risk from flooding due to blockages caused by trees carried down river in flood events.									
Conduct survey of bankside tree condition and develop a tree management programme in consultation with conservation interests.	NRA	Riparian Owners, RSPB, Conservation Bodies	6k (NRA costs)		■				
Implement the management programme	NRA		10k			■			Ongoing (5k p.a.)
ISSUE 21 Section 105 Surveys are required to identify the extent of lands liable to flood, and to assist Local Planning Authorities (LPAs) with preparation of their development plans.									
a) Liaise with all Planning Authorities to determine order for carrying out catchment surveys	NRA	LPAs	50k NRA cost	■					
b) Undertake S105 surveys for the Ogmore catchment	NRA	93k			■	■	■	■	By end of 1999

## ISSUES AND ACTIONS

ISSUE 22      Inadequate flood warnings for the Ogmore Catchment.									
ACTIONS	RESPONSIBILITY		COST £	1995	1996	1997	1998	1999	FUTURE
	LEAD	OTHER							
a) Develop rainfall/runoff models to provide improved flood forecasts	NRA		10k			■			
b) Install raingauge/telemetry to provide input into forecasting models	NRA		5k			■			
ISSUE 23      The impact of routine maintenance works on the riverine environment, specifically in the Bridgend and Waterton areas.									
a) Locate sources of gravel and identify measures to reduce erosion.	NRA		1k	■					
b) Review existing maintenance practices to determine whether impact of works on riverine environment can be reduced.	NRA		5k		■				
c) Investigate possibility of additional catchpits in catchment and make recommendations.	NRA		Un-known		■				
d) Implement recommendations from a), b) and c) where appropriate.	NRA		Un-known			■	■	■	Ongoing
ISSUE 24      Man made culverts prevent the upstream passage of migratory fish on the Llynfi and Garw. Obstructions are also present on the Ogwr Fawr and Fach, but it is not currently considered possible to alleviate the problem at these sites.									
SEE UPDATE									
Design and undertake remedial works in order to facilitate the passage of fish and improve aesthetic nature of the riverine environment on:	MGCC	NRA Riparian Owners							
a) the Llynfi at Caerau			140k*		■	■			
b) the Garw at Blaengarw			1m*	■	■	■			

\* Includes all works not necessarily targeted at fish passage.

## ISSUES AND ACTIONS

### ISSUE 25

#### SEE UPDATE

There is a need to assess the conservation value of the river corridor and identify sensitive, valuable and also degraded habitats.

ACTIONS	RESPONSIBILITY		COST £	1995	1996	1997	1998	1999	FUTURE
	LEAD	OTHER							
a) Review RCS data and highlight: i) sensitive and valuable areas ii) degraded areas.	NRA		0.5k						
b) Undertake River Habitat Surveys (RHS) in order to assess riverine value.	NRA		4k						
c) Incorporate appropriate measures within the NRA's routine work programme to ensure compliance with the NRA's conservation duty.	NRA		Un-known						Ongoing
e) Seek collaborative involvement in areas where improvements required.	NRA	Ground-work Ogwr/ CCW/ OBC/VG BC/ MGCC/ Heritage Coast	Un-known						Ongoing

### ISSUE 26

Opencast workings, land reclamation schemes and other major developments may render important habitats vulnerable to degradation and these habitats should be protected and/or reinstated. Such schemes may also impact upon anglers' legal rights of amenity downstream.

a) Ensure that pre and post scheme Environmental Appraisals are undertaken on major schemes prior to issuing Land Drainage Consents.	Devel- oper (eg MGCC)	NRA	Un-known						Ongoing
b) Agree mitigation prior to issuing Land Drainage Consent.	NRA	Devel- oper	Un-known						Ongoing
c) Ensure sensitive areas are clearly highlighted.	NRA	Devel- oper	Un-known						Ongoing
d) Monitor schemes closely in consultation with all interested parties ensuring that any problems are highlighted without delay and solutions sought.	NRA	Devel- oper	Un-known						Ongoing
e) Educate developers and anglers about each other's requirements and the objectives of the respective organisations.	NRA	Devel- opers, Anglers	0.5k						Ongoing



## ISSUES AND ACTIONS

### ISSUE 27 SEE UPDATE

Invasive weeds are present throughout the plan area.

ACTIONS	RESPONSIBILITY		COST £	1995	1996	1997	1998	1999	FUTURE
	LEAD	OTHER							
a) Continue to implement effective and co-ordinated control measures within the catchment. Refine methods and adopt "best practice".	NRA	LPAs, Riparian Owners							Ongoing
b) Increase public awareness about invasive weeds and control measures by the strategic distribution of the NRA leaflet 'Guidance for the Control of Invasive Plants near Watercourses' e.g. through planning consultations and Local Information Points.	NRA		0.2k p.a.						Ongoing

### ISSUE 28 SEE UPDATE

Improve riverside access by developing links in footpath network.

a) Complete proposed works on Bridgend to Blackmill stretch of the system.	Ground-work Ogwr	LPAs, Riparian Owners, Project Sponsors	25k per km						
b) Plan and implement works on:	Ground-work Ogwr		25k per km						
i) Llynfi Valley route									
ii) Garw Valley route.									

### ISSUE 29 SEE UPDATE

Low fish populations have been found in the Ogmore downstream of Bridgend.

a) Review available data and attempt to ascertain the historic perspective of the problem.	NRA		0.2k						
b) Attempt to identify causative factors and measures which may reduce their impact.	NRA		0.5k						
c) Implement measures as appropriate.	NRA	Angling Clubs/ fishery Owners	Un- known						

## ISSUES AND ACTIONS

### ISSUE 30 SEE UPDATE

Illegal fishing reduces stocks of fish for bonafide angling and spawning.

ACTIONS	RESPONSIBILITY		COST £	1995	1996	1997	1998	1999	FUTURE
	LEAD	OTHER							
a) Continue enforcement of legislation in an effective and co-ordinated manner.	NRA		25k p.a.						Ongoing
b) Review effectiveness of all byelaws and introduce new proposals where necessary.	NRA	SWSFC, Angling Clubs.	1k						

### ISSUE 31

There is little access to the River Ogmore for canoeing purposes.



a) Establish contacts with angling clubs in order to pursue access arrangements in areas where public rights of navigation do not exist.	WCA	Angling Clubs	0.2k (WRA costs)						Ongoing
b) Mediate between WCA, Angling Clubs and Landowners to promote canoeing access agreements	NRA	WCA, Angling Clubs, Land-owners	0.4k NRA Cost						Ongoing



### ISSUE 32

Litter deposited by sea anglers detracts from the aesthetic appeal of popular tourist spots and endangers wildlife.

a) Warn anglers of the hazards that their waste may cause through:-	OBC	Heritage Coast, Anglers							
i) Signage			0.2k						
ii) Posters			0.2k						
iii) PR Campaign.			0.2k						
b) Provision of suitably sited disposal facilities.	OBC		0.4k						

## ISSUES AND ACTIONS

ISSUE 33										
"Standards of Service" for SSSIs have yet to be formally agreed with CCW.										
ACTIONS	RESPONSIBILITY		COST £	1995	1996	1997	1998	1999	FUTURE	
	LEAD	OTHER								
a) Agree "Standards of Service".	NRA	CCW	0.5k							
b) Implement the agreed standards.	NRA	CCW	0.5k NRA cost p.a.						Ongoing	

ISSUE 34										
Certain developments, such as those within the flood plain or adjacent to the river corridor, may impact on the NRA's environmental and flood defence interests.										
a) Ensure suitable policies are included in Local District Plans through the consultation process.	NRA	LPA	2.5k							
b) Set up meetings/seminar to enhance liaison with LPA's.	NRA	LPA	1k							



## FUTURE REVIEW AND MONITORING

We will be jointly responsible, with other identified organisations and individuals, for implementing this Action Plan. Progress will be monitored and normally reported annually. These reviews will examine the need to update the CMP in the light of changes in the catchment. The period between major revisions will normally be five years.

The annual review, which will be made widely available, will take the form of a short progress report, to include work achieved compared with that planned, and to highlight any changes to the plan.

## GLOSSARY TO ACTION PLANS

The following abbreviations have been used in the main text and tables:

AMP	Asset Management Plan	OBC	Ogwr Borough Council
BOD	Biochemical Oxygen Demand	OFWAT	Office of Water Services
CA	Coal Authority	p.a.	per annum
CC	Community Council	R&D	Research and Development
CCW	Countryside Council for Wales	RA	The Ramblers Association
CLA	Country Landowners Association	RE	River Ecosystem
CSO	Combined Sewer Overflow	RCS	River Corridor Survey
DCWW	Dŵr Cymru Welsh Water	RJSMP	Regional Juvenile Salmonid Monitoring Programme
DO	Dissolved Oxygen	RSPB	The Royal Society for the Protection of Birds
DSC	District Sports Council	SCW	Sports Council for Wales
FAW	Forestry Authority for Wales	SSSI	Site of Special Scientific Interest
FE	Forest Enterprise	STW	Sewage Treatment Works
FUW	Farmers' Union of Wales	SWSFC	South Wales Sea Fisheries Committee
HMIP	Her Majesty's Inspectorate of Pollution	TEBC	Taff Ely Borough Council
KWTC	Keep Wales Tidy Campaign	VGBC	Vale of Glamorgan Borough Council
LPA	Local Planning Authority	WCA	Welsh Canoeing Association
LTRQO	Long Term River Quality Objective	WO	Welsh Office
MAFF	Ministry of Agriculture, Fisheries and Food	WRA	Waste Regulation Authority
MGCC	Mid Glamorgan County Council		
NFU	National Farmers' Union		

## The Environment Agency

The new Environment Agency for England and Wales will be created in April 1996 by the merger of the NRA, Her Majesty's Inspectorate of Pollution and the Waste Regulation Authorities. It will be the largest environmental protection agency in Europe. While it will incorporate the full role of the NRA there will be wider responsibilities for integrated pollution prevention and control, of air, land and water. One of the Agency's principal aims will be to contribute towards attaining the governmental objective of achieving sustainable development by protecting or enhancing the whole environment.

The government has recognised both the success of integrated river basin management, as developed and practised by the NRA, and the importance of CMPs as an integral part of that philosophy. It is therefore anticipated that CMPs will continue as the focus for river basin management in the Agency, although they may be developed in the context of wider management plans for the protection and enhancement of water, land and air.



## INTRODUCTION

Since the production of the Draft Ogmore Catchment Management Plan in 1992, the following Issues have been resolved, and are therefore not included in the Ogmore Action Plan, January 1996.

## UPDATES ON ISSUES RESOLVED SINCE PUBLICATION OF THE DRAFT OGMORE CMP

### Issue 6.2 Ammonia Levels

Following the failure to achieve ammonia targets, compliance was re-assessed using contemporary data with more robust assessment methods. The levels are now compliant with their targets.

### Issue 6.3 Reducing Suspended Solids Levels

Failures of suspended solids standards were an Issue. The land reclamation schemes to the north of the Llynfi valley have since been completed, apart from landscaping work. This, together with the dramatic improvements to the quality of the discharge from the Jamont Paper Mill, has enabled the target to be achieved for suspended solids. Monitoring of leachate and run-off from a tip on the Nant-y-Gedd will continue to ensure no deterioration occurs to the water quality of this stretch.

### Issue 6.4 Metal Concentrations

Failures of metals targets were revealed. The compliance with targets have since been re-analysed using contemporary data with more robust assessment methods. The levels are now compliant with their targets.

### Issue 6.7 Surface Water Abstractions (Quality)

An issue was raised that at some minor sources within the catchment, the water quality may fail to meet the EC Surface Water Directive. This is no longer an issue as all the surface water abstractions in the catchment have been decommissioned.

**Issue 6.8 Coastal Water Quality**

Ogmore Beach failed to conform with aesthetic standards for bathing and immersion sports. This beach, which is not an identified bathing water under the EC Bathing Waters Directive, is adjacent to the mouth of the river where very dangerous currents exist and fatalities have occurred. Penybont sewage treatment works (STW) also discharges into the lower estuary. The Local Authority does not intend to develop facilities at this beach and actively discourages, and warns against, bathing. Newton Beach, on the opposite side of the river mouth is privately owned. Nevertheless, other issues to be pursued as part of the Action Plan will benefit the aesthetic quality of both Ogmore and Newtown beaches.

The two other beaches in the catchment, Trecco Bay and Sandy Bay, are identified bathing waters and now conform with the standards used by the Department of the Environment to assess compliance with the EC Bathing Waters Directive. The improvement at these sites results from the diversion, in 1991, of crude sewage effluent, previously discharged at Porthcawl, to Penybont STW.

The Department of the Environment encourages Local Authorities to display water quality results on beaches at identified bathing waters and provides guidance on the format to be used. The NRA, which supplies Ogwr Borough Council with the relevant information during the bathing season, would wish to see these results displayed at Trecco Bay and Sandy Bay and will be pursuing this with that Authority.

**Issue 6.10 Water Temperature**

River temperature did not meet the relevant targets in parts of the Llynfi catchment, especially below the Jamont Paper Mill site. The impact of the effluent was a cause for concern, because it raised the river temperature by up to 6°C downstream of the discharge point. Further critical review of this issue has indicated that it is unlikely that the temperatures recorded could have resulted in detrimental effects on salmonids in this instance. For this reason no further specific action is proposed other than to continue to monitor temperature in the catchment.

**Issue 6.11 Poor Biological Quality (Llynfi)**

The middle reaches of the Llynfi had poorer biological quality than expected when compared to the water chemistry. The new effluent treatment plant at the Jamont Paper Mill, which was commissioned in 1991, has resulted in improved biological quality within this stretch. This is also reflected by an improvement in water quality from RE Class 3 to RE Class 2.

In the River Alun, detailed biological surveys have indicated that the fauna is less diverse than would be expected. The likely explanation for this is that, during prolonged dry weather conditions, the river dries up. However, since the seepage of water into the river bed is a natural phenomenon, and the resultant ecology characterises the river, no further action will be taken.

**Issue 6.14 Low Flows in the Alun and Ewenny**

During periods of prolonged dry weather stretches of the Alun and Ewenny Fach become dry through seepage into the bed. No further action is proposed on either watercourse because these are natural features of the catchment. However, in the case of the Ewenny the situation may need to be reviewed at some time in the future if there are potentially greater demands placed upon either groundwater or surface waters in the catchment. This matter is related to the investigation being undertaken into the Carboniferous Limestone Aquifer in this area.

## NRA WELSH REGION - OGMORE CMP ACTION PLAN UPDATE (JANUARY 1996)

**Issue 25**      There is a need to assess the conservation value of the river corridor and identify sensitive, valuable and also degraded habitats.

River Corridor Surveys (RCSs) have been completed for the Ewenny (in 1991) and the Ogmere (in 1992) river systems which will contribute to the resolution of this issue.

Various initiatives have been attempted in the Bridgend and Waterton areas in order to attempt to enhance the fish habitat in the areas of the flood defence schemes. These have included:

- a) Groynes with hidden pipes to provide cover for migrating adult salmon and sea trout;
- b) Several low weirs constructed to provide additional habitat;
- c) Artificial sand martin nests;
- d) Provision of Climbing plants;
- e) Provision of bankside vegetation in the Bridgend scheme.

Further measures to enhance the habitat will be considered as appropriate opportunities arise.

**Issue 27**      Invasive weeds are present throughout the plan area.

A booklet entitled 'Guidance for the Control of Invasive Plants near Watercourses' was produced by the NRA in 1994 and has been widely disseminated to local authorities and other interested parties to help address the problem.

**Issue 28**      Improve riverside access by developing links in footpath network.

Groundwork Ogwr (formerly Ogwr Groundwork Trust) have completed a major length of community route from New Mill to Nant-y-moel. Work is due to commence shortly on the Bridgend to New Mill stretch.

**Issue 29**      Low fish populations have been found in the Ogmere downstream of Bridgend.

A detailed study aimed at investigating the low fish populations in parts of the catchment was undertaken in 1992. Whilst the work suggested that the habitat was adequate, the fish populations were lower than expected. One of the main reasons is believed to be the siltation of gravels as a consequence of works, specifically land reclamation schemes, in the upper catchment.

**Issue 30**      Illegal fishing reduces stocks of fish for bonafide angling and spawning.

In order to maintain an effective enforcement presence the NRA has continued to support a Temporary Bailiff in the Ogmere catchment during the busiest period of the year.

The South Wales Sea Fisheries Committee has promoted byelaws on behalf of the NRA which restrict netting in the Ogmere Estuary and surrounding coastal waters in order to protect migratory salmonids.



## **INTRODUCTION**

Between the production of the Draft Ogmore Catchment Management Plan in 1992 and publication of the Ogmore Action Plan in January 1996, progress has been made towards resolving each of the following Issues. Full details of the Issues, including responsibilities and costs, are contained in the Ogmore CMP Action Plan January 1996.

## **UPDATES ON CURRENT ISSUES**

<b>Issue 8</b>	<b>Poor biological quality of the Llynfi in the Maesteg area caused by Caerau Land Reclamation Scheme and problematic CSOs.</b>
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The River Quality Assessment, set out in the Draft Ogmore CMP, used data from the period 1988 - 1990 inclusive. This highlighted problems in the Llynfi downstream of the Jamont Paper Mill outfall, particularly with BOD and "sewage fungus". Treatment on site at this time was limited to screening and settlement (preliminary and primary treatment).

A new treatment plant, which includes a biological treatment process and further settlement, was commissioned in March 1991, following an investment of £3 million. River quality has improved significantly since then, the river maintaining RE Class 2 downstream of the outfall. The water quality upstream is of RE Class 3 and reflects the impact of the Lletty Brongu STW.

The Jamont Paper Mill discharge does not now adversely affect water quality in the Llynfi, there is no "sewage fungus" downstream of the outfall, and fish populations have now improved.

<b>Issue 16</b>	<b>The Llynfi fails to achieve its water quantity target downstream of the abstraction by Jamont Paper Mill.</b>
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Various options for resolving the low flow situation at Jamont Paper Mill have been investigated. These include augmentation of the river by either surface storage or groundwater, and replacing part of the abstraction with groundwater. The cheapest option would appear to be relocation of the outfall to the abstraction point. The benefits of such a scheme now need to be evaluated to establish if implementation can be justified. Despite very low flows resulting from the drought conditions in 1995 no significant problems were reported at this location. This may be due largely to the effluent recycling which Jamont deploy to relieve the deficiency in water available.

<b>Issue 24</b>	<b>Man made culverts prevent the upstream passage of migratory fish on the Llynfi and Garw. Obstructions are also present on the Ogwr Fawr and Fach, but it is not currently considered possible to alleviate the problem at these sites.</b>
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The two obstructions originally identified, the Sychbant culverts and the Braich-y-Cymer gratings, have now been alleviated. A fish ladder has been constructed in the Sychbant and the gratings removed from the Garw.



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