### **Foreword**

The River Lyn Salmon Action Plan aims to promote a sustainable fishery based on a healthy salmon stock. This will bring enhanced environmental, social and economic benefits to the catchment as a whole.

The plan seeks to develop partnerships with other organisations and individuals, to implement the actions that have been identified to bring about the required improvements.

We are very grateful for the contributions made during the consultation phase, and the spirit of partnership which has already been generated.

### **GEOFF BATEMAN**

Area Manager (Devon)

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### **Executive Summary**

The River Lyn Salmon Action Plan (SAP) has been produced after consideration of feedback from public consultation. The consultation document was published in November 2003. This final plan provides a list of the agreed issues and actions for the next five years to maintain and improve the River Lyn salmon stock. For each action, partners have been identified together with a timescale under which they will be carried out.

The River Lyn is currently meeting its salmon stock conservation limit. However, given that the stock is relatively small and that the methodology for assessing the conservation limit is still in its infancy, we must not be complacent about the state of the fishery. Further, the lack of information on salmon stock – we continue to rely on rod catch data, rather than direct fish counts - and its habitat is recognised as one of the main factors limiting the better management of salmon fisheries. Efforts will be focused on gaining more river specific knowledge and improving modelling techniques. The actions presented in this document are seen as those that will address the important issues and factors limiting the salmon stock.

This SAP aims also to promote long term collaboration between the Agency and other interested parties in managing the River Lyn salmon stock and fisheries.

#### Introduction

In 1996, the National River Authority published "A strategy for the management of Salmon in England and Wales". This national strategy identifies clear objectives that allow resources to be focused on priority activities. It provides consistent policies and frameworks to manage stocks. The objectives for the future management of this resource are given as:

- (i) Optimise the number of salmon returning to home water fisheries.
- (ii) Maintain and improve fitness and diversity of salmon stocks.
- (iii) Optimise the total economic value of surplus stocks.
- (iv) Ensure beneficiaries meet necessary costs.

The strategy document outlines how these could be achieved in practice to ensure the sustainable exploitation of our salmon, so conserving this species for future generations.

The Environment Agency is committed to implementing this strategy by means of local Salmon Action Plans produced by the end of 2003 for all our principal rivers, after consultation with local interest groups.

The River Lyn Salmon Action Plan consultation document was published in November 2003 for consultation with external interest groups and organisations, and:

- Introduced the river–specific conservation limit of 0.96 million eggs and assessed the current stock to be above this conservation limit.
- Identified factors limiting salmon survival and production in both the marine and freshwater phase of the life cycle.
- Justified a programme of works necessary to enable improvements and development measures.

Using the feedback of the external consultation, this final plan provides a clear statement of actions to be undertaken, with an indication of timecales, priorities, and potential partnerships. Some of these actions are currently being addressed.

A key rôle of this plan is to provide a reference document for monitoring the progress of the actions for the next 5 years.

This plan should be read in conjunction with the River Lyn Consultation Plan (November 2003).

### 1. Issues raised through public consultation

The River Lyn Salmon Action Plan consultation document described the River Lyn salmon stock and its environment, highlighted major issues and outlined the Environment Agency's proposals for addressing identified constraints. The report was published in November 2003 and the consultation was carried out throughout November 2003.

Fifty copies were sent to all relevant Environment Agency departments, to external organisations and to parties who have an interest in the River Lyn and its salmon population. A consultation meeting was held with the River Lyn Riparian Owners Association on 14th November. The consultation aimed to seek views and support for the pursuit of collaborative actions. A list of the consultees who responded is attached in the appendix.

Two written responses were received from external consultees. Responses indicated that consultees were broadly in agreement with the issues identified and actions required to progress them.

The low adult return rate (proportion of smolts returning as adults into coastal waters) and the lack of knowledge about salmon stocks and habitat should provide a justification for targeting of actions where environmental opportunities can be exploited and it is suggested that these actions are prioritised as follows:

- **First priority: maximising spawning activity:** carry out actions that will contribute to maximising the utilisation of spawning habitat by returning adults.
- Second priority: gaining management information: carry out actions that will contribute to the improvement of our knowledge about salmon stock and habitat.
- Third priority: ensuring consistency in fishery regulations: carry out actions that will ensure that fishing regulations designed to protect and conserve the stock are applied consistently throughout the whole river.

The Agency will continue to encourage voluntary catch controls in the rod fishery in order to contribute to a reduction in exploitation rates. Rod fishing in the River Lyn is highly efficient compared with other rivers in the South West, particularly because of the physical characteristics of the river, but also because of the use of worm as bait. It is important that sensible controls, such as the curtailing of worming, are promoted in the rod fishery to avoid over-exploitation in this small and potentially vulnerable fishery.

Initiatives to investigate and/or address some of local issues on the River Lyn are identified and prioritised in the following table "Issues and Actions". Key partners are identified with the lead partner highlighted in bold letters. Actions are aimed to conserve salmon populations and habitat from future developments and from new threats, as well as to resolve present issues.

## 2. Management of the plan

The local area fisheries technical team (part of the Fisheries, Recreation and Biodiversity team) is responsible for the production of the consultation document and final plan. The team will report on progress with the actions which will involve the work of other Environment Agency teams and external partners and interested parties.

An annual review will be carried out. It will consist of an overview of the following key points:

- The performance of rod fishery
- Participation in the rod fishery
- Status of the salmon stock with respect to conservation limit.
- Progress and review of the actions.

Implementation of the plan will take place under the aegis of the Lyn Riparian Owners Association. Once all the plans have been completed for the south west salmon rivers, it is our intention to deal with the rivers in a strategic way. Many of the issues and people involved across plans are similar and the plans could be managed around common issues, partners or geographical areas. The way Salmon Action Plans will be managed in Devon Area will be developed during 2004. We will advise external parties during this time.

# **Issues and Actions**

ISSUE	ACTION	TIMESCALE			PARTNERS	Ref		
VH= Very High priority Medium priority , L= Lo		03/	04/	05/	06/ 07	07/ 08		
LACK OF INFORM	ATION FOR FISHER	Y MA	NAG	EMEN	VT			
Insufficient monitoring of adult salmon run	Assess feasibility and cost effectiveness of operating fixed engine trap or other method for direct salmon counting (H).	*	*				Agency, Riparian owners and Fisheries interests	
Uncertainty in the rod exploitation estimates	Improve rod exploitation rate model to take into account river flows, angling method, salmon fishing effort (VH).	*	*	*	*	*	Agency National Fisheries Technical Team.	
Insufficient information related to salmon fishing effort	Differentiate between angling effort targeted to salmon and angling effort targeted to sea trout (H) and consider introducing an angler's logbook scheme to improve quality of catch and effort data. (H).		3/c	*			Agency National Fisheries Technical Team. Riparian owners and fisheries interests.	
Insufficient information relating to the freshwater habitat availability and constraints acting on them.	Develop an Agency habitat assessment, classification and mapping procedure, part of the current Research and Development projects (River Fisheries Habitat Inventory and Salmon Life Cycle Model) in order to improve conservation limit assessment (H).	*	*	*	*	*	Agency National Fisheries Technical Team.	
	List available suitable spawning and juvenile habitats and key limiting factors using developed Agency procedure, in order to decide whether any habitat problem needs addressing.(VH)	*	*	*			Agency Riparian owners and Fisheries interests	
Insufficient information relating to freshwater production	Deliver juvenile routine monitoring programme in accordance with national guidelines (H) and as far as possible to link these with invertebrate and chemical monitoring (H).  Consider need for additional monitoring (H).	*	*	*	*	*	Agency	
	Carry out HABSCORE surveys and analysis as recommended by the national monitoring programme to determine carrying capacity and any limiting factors (VH).	*	*	*			Agency	

ISSUE	ACTION	TIM	<b>IESC</b>	ALE			PARTNERS	Ref
VH= Very High priority Medium priority, L= Lo		03/	04/	05/	06/ 07	07/		
PHYSICAL DECRA	DATION OF RIVER I			00	U /	00		
Changes in flow regime as a result of overgrazing and inappropriate burning within the catchment	Work with partners to investigate the relationship between overgrazing and inappropriate burning on blanket bog quality and riverine flow regimes – MIRE Project (M)	*	*				Agency, <b>ENPA</b> , EN	
Soil erosion and land run off	Evaluate land use, risk of erosion and excessive run off. Take appropriate action if benefits for salmon population are demonstrable L			*	*	*	Agency, ENPA, EN, <b>DEFRA</b>	
IMPACTS OF WA	TER SURFACE ABS	TRA	CTIO	NS				
Flow reduction due to water surface abstractions	Ensure adequate levels of protection for the river if new licences are granted (VH).	*	*	*	*	*	Agency Abstractors	
ILLEGAL EXPLOIT	<b>FATION</b>							
Illegal exploitation in freshwater, estuary and coastal waters occurring most times of the year.	Review current level of enforcement in the catchment. (H) Consider remote surveillance of key poaching areas. (H)	*	*	*	*	*	Agency Riparian owners and Fisheries interests	
EXPLOITATION A	T UNKNOWN STOCK	LEV	EL	ı	Į.	-		ı
Exploitation of River Lyn salmon stock by Irish drift nets at unknown level	Assess the significance of the Irish fishery to exploitation on south west rivers and influence management of fishery by Irish authorities (VH).		*	*	*		Agency <b>DEFRA</b>	
Angling exploitation at unknown level of stock and risk of over exploitation	Manage the rod fishery based on the precautionary principle.(H)	*	*	*	*	*	Agency	
	Promote more catch and release and promote more use of barbless hooks to aid survival after release (VH). Reassess the use of natural baits in the fishery(H) Promote the conservation restrictions applied on the Agency managed fishery throughout the catchment	*	*	*			Agency	
	(VH)	*	*	*	*	*	Agency Riparian owners and fisheries interests	

ISSUE	ACTION	TIMESCALE				PARTNERS	Ref	
VH= Very High priority Medium priority , L= Lo		03/ 04	04/ 05	05/ 06	06/ 07	07/ 08		
LOW LEVEL OF	MSW SALMON STO	<b>OCK</b>						
Long term national decline of spring salmon and MSW salmon	Develop local measures to increase level of MSW spawners (H).  Develop voluntary measures through the angling associations' regulations (H).  Review effectiveness spring	*	**	*	*	*	Agency Riparian owners and Fisheries interests	
ODSTDUCTION	salmon measures in 2008 (M).	*	*	*	*	*		
Restricted access because of natural barriers which allow fish passage at a narrow range of flows	Consider improvements to fish passage at Vellacotts Pool (M) and Long Pool (M)	*	*	*			Agency, National Trust	
Restricted access because of temporary structures	Ensure "tripper dams" are removed before spawning migrations occur. (H) Work with ENPA and National Trust to educate the public and limit the construction of these barriers (M)	*	*	*	*	*	Agency, ENPA, National Trust	

EN: English Nature DEFRA: Department for Environment, Food and Rural Affairs ENPA: Exmoor National Park Authority

#### **References:**

Environment Agency (2003), River Lyn Salmon Action Plan consultation document.

National Rivers Authority (1996), A Strategy for the management of Salmon in England and Wales.

## **Appendix: List of consultees who responded:**

The Atlantic Salmon Trust National Trust River Lyn Riparian Owners Association Westcountry Rivers Trust

The Environment Agency would like to thank all those who have responded and sent helpful comments. The River Lyn Riparian Owners Association and its members deserve particular credit for their assistance in developing this plan.