



**Cyfoeth
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Natural
Resources
Wales**

Know Your River – River Loughor Salmon and Sea Trout Catchment Summary

Introduction

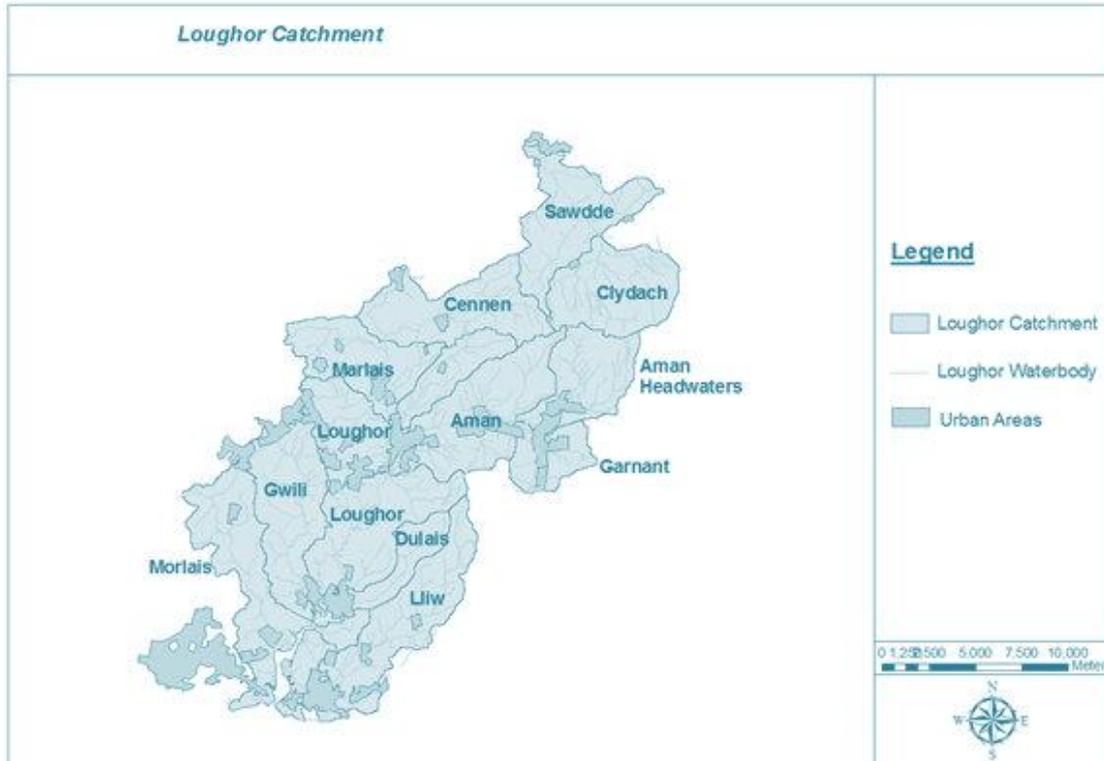
This report describes the status of the salmon and sea trout populations in the Loughor catchments. Bringing together data from rod catches, stock assessments and juvenile monitoring, it will describe the factors limiting the populations and set out the challenges faced in the catchment.

Action tables set out habitat improvements to restore freshwater productivity of salmon and sea trout populations. These tables also include some work which will be carried out by our partner organisations, not just Natural Resources Wales (NRW).

NRW has a duty, defined in the Environment (Wales) Act 2016 to have Sustainable Management of Natural Resources (SMNR) at the core of everything that we do. By applying the principles of SMNR in all of our activities - from agriculture, forestry and flood defence to development planning - we are undertaking catchment-wide initiatives that will deliver for fish stock improvements. Our reports highlight the importance of considering the whole catchment when identifying and addressing fisheries issues; and of working with partners.

NRW is committed to reporting on the status of salmon stocks in all of our principal salmon rivers for the Salmon Action Plans and condition assessments under the Habitats Directive in SAC rivers; all fish species in all of our rivers are reported for the Water Framework Directive (WFD). This report will fulfil these commitments and provide an informative and useful summary of stock status and remedial work planned, for our customers, specifically anglers, fishery and land owners; as well as our partners.

River Loughor



The River

The Loughor rises at 616 AOD, in the remote uplands of the Black Mountains in the northeast of the catchment. It has a catchment area of 176.75km², and runs 24.9 km in a southwesterly direction entering the Loughor estuary and Burry Inlet. The catchment is predominantly rural in nature, though some industry is also present.

The catchment comprises major developed areas along the lowland floodplain, especially at Llanelli, Pontardulais and Ammanford and is home to a wide range of industry, with large new industrial estates at Cross hands and Capel Hendre. Previous industrial activity has left a legacy of contaminated land, particularly at Llanelli. As with other South Wales valleys there is widespread coal extraction and associated processes present throughout the catchment, with a number of deep mines, opencast sites and coal washeries.

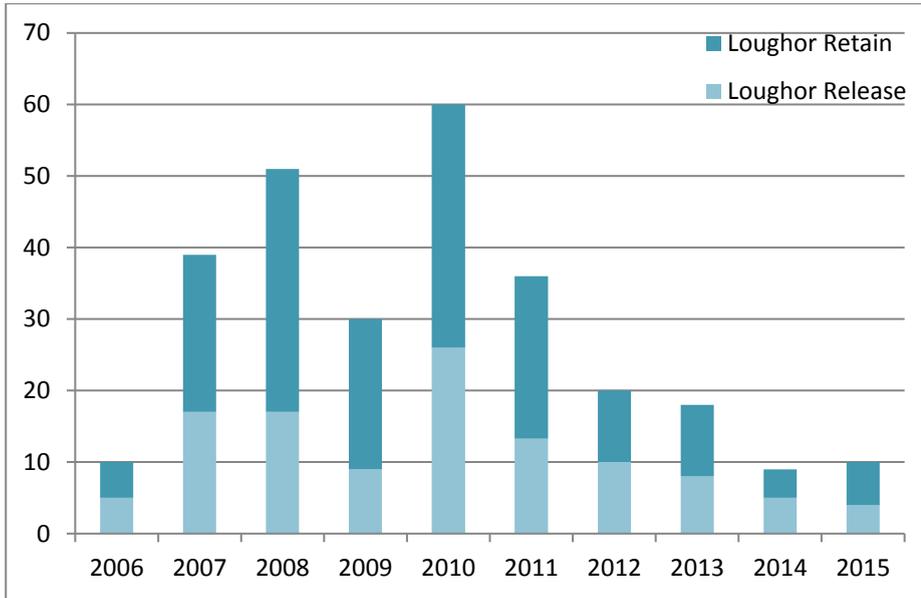
Agricultural activity is widespread throughout the catchment although larger dairy units are found to the west, with mixed livestock farming to the east and on the high ground in the headwaters.

The Loughor is the principal river of the catchment, with the Lash, Amman, Gwili and Morlais forming major tributaries. The Loughor descends steeply in its upper reaches and hence responds quickly to heavy rainfall. This flashy characteristic dominates over the contribution of groundwater to the flow regime.

Rod catches

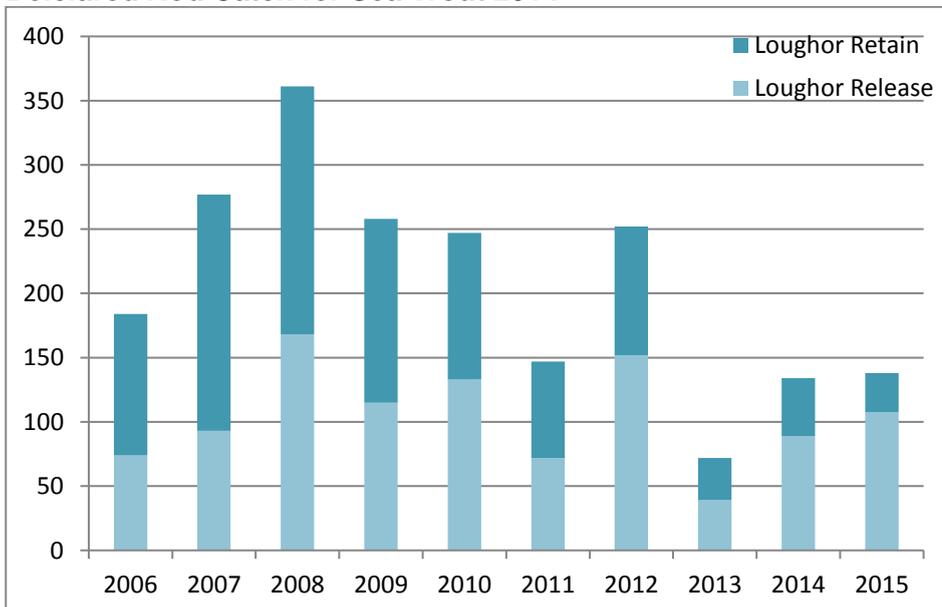
Declared salmon rod catch for the last 10 years has been variable with the highest catches in 2008 and 2010. The average rate of salmon catch returned alive for the period shown is 43% and 40% for 2015. Both these figures are below the Welsh average of 60%.

Declared Rod Catch for Salmon 2014



Declared sea trout rod catch has also been variable over the last 10 years. The highest recorded catch was in 2007 and 2008. The average rate of sea trout returned alive was 52% and 78% for 2015. The 2015 release rate was higher than the Welsh average of 72%.

Declared Rod Catch for Sea Trout 2014



Stock Status

Conservation of Salmon

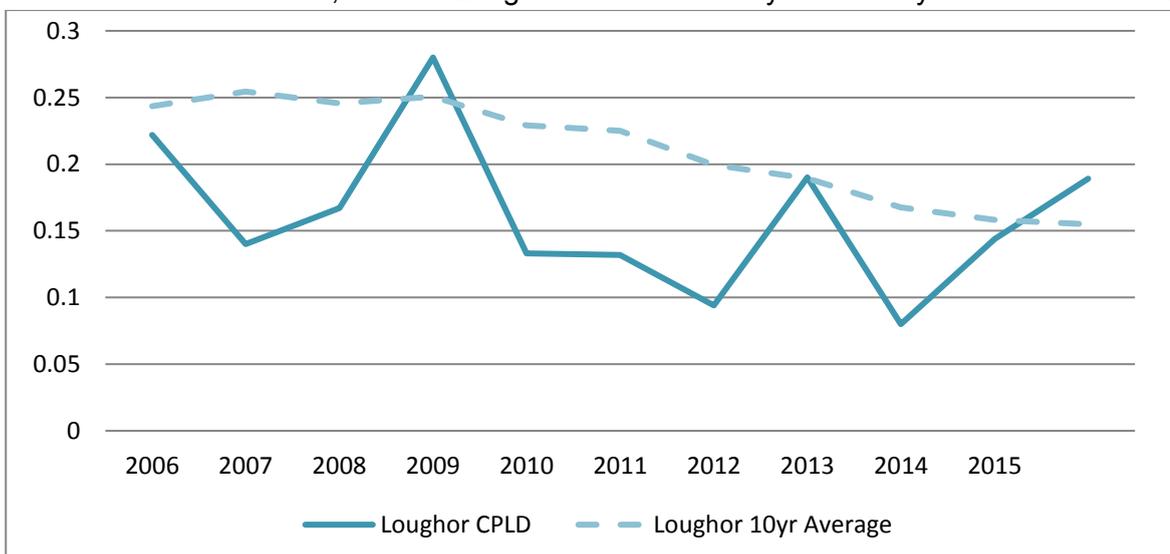
Salmon stock status is assessed through the use of 'Conservation Limits' which provide an objective reference point against which to assess the status of salmon stocks in individual rivers. The numbers of salmon a river can produce (and consequently the catches that the stocks support) are a function of the quality and quantity of accessible spawning and rearing area. This is why, in general, big rivers have larger catches and have correspondingly bigger total spawning requirements than small rivers. Thus, for any given rivers there should be an optimum level of stock which the CL seeks to protect. The conservation limit represents the number of eggs that must be deposited each year within a given catchment in order to conserve salmon stocks in the future.

In the case of the Loughor, the low reported rod catches of salmon mean that it is not possible to obtain an accurate estimation of egg deposition for the river, due to the potential errors involved. Assessment of compliance against the conservation limit has therefore not been attempted.

Conservation of Sea Trout

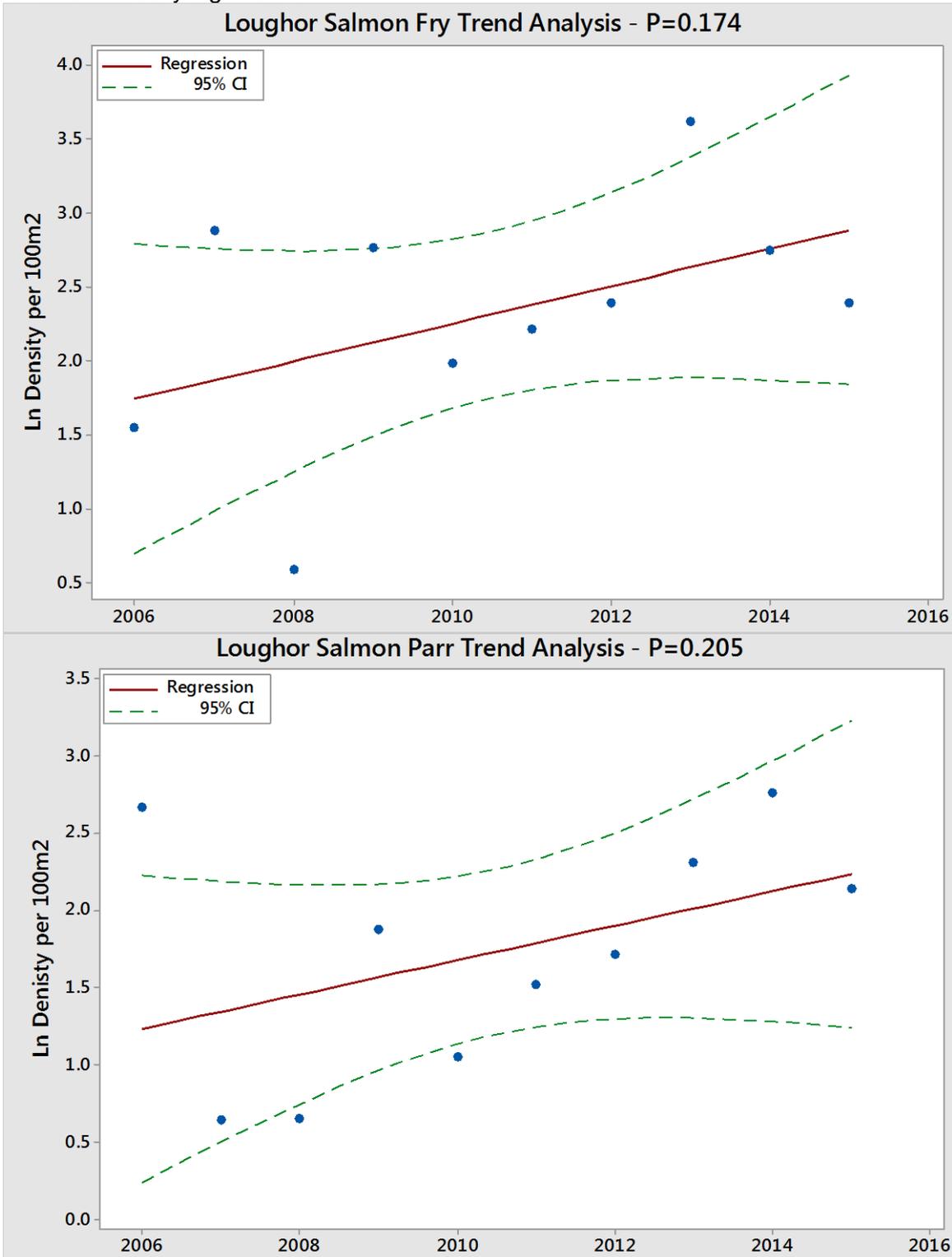
Our approach to assessing sea trout stock performance is still under development. It is based on catch trends in the last three years compared with those in the previous ten. The assessment gives an early warning about potential problems and assists with considering whether any further management actions are required. It provides an indication of changes in fishery performance, though this is not always a reflection of stock performance.

Catch per License Day (CPLD) is the average number of fish caught for each day fished on the river and as such accounts for the variability in the amount of fishing effort between years. These statistics can be a better guide than simply looking at the total catch. The CPLD figures for the Loughor for the period 2006 to 2015 are shown below. Catch per Licence Day on the Loughor shows a downward trend, and the Loughor sea trout fishery is currently classified as '**At risk**'.

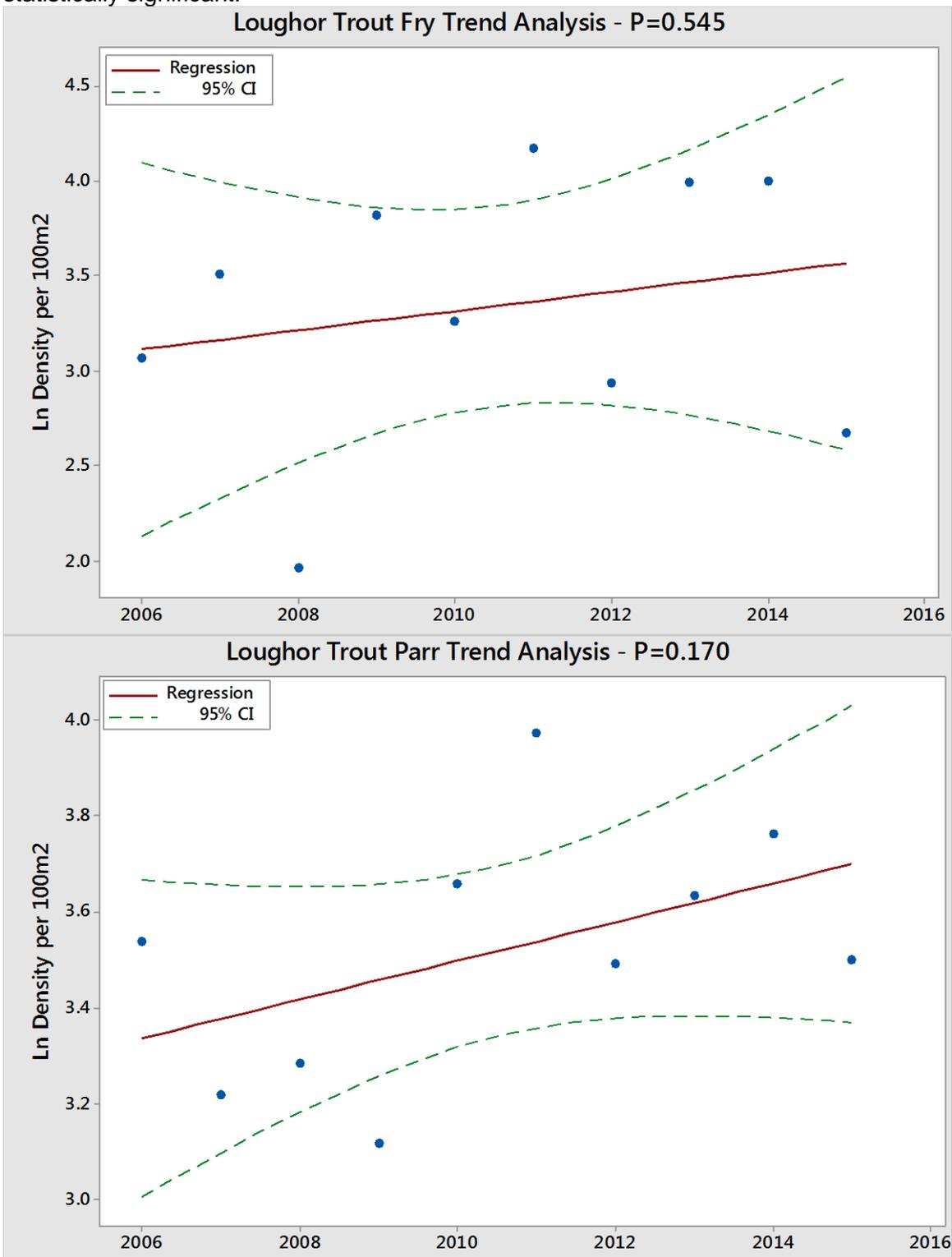


Juvenile Trend Analysis

Juvenile salmon data shows a slight upward trends for both fry and parr. However fry and parr data is not statistically significant.



The juvenile trout data shows slight upward trends. However neither of these trends are statistically significant.



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Fisheries Mitigation Plan

Site	Mitigation action	Benefits	Lead	Partner(s)	Timescales for delivery
Loughor	Habitat improvements: We will investigate where there is opportunity to improve habitat for fish through improving access over barriers, restoration of riparian and instream habitat, including control of invasive species	More natural river system, reduced siltation, increased flow diversity, improved spawning gravels and juvenile habitat. Improved fish numbers.	NRW		Ongoing
	Water Framework Directive: We will continue to work to ensure no deterioration, monitor the status of the environment and investigate the causes of failures. Together with our partners we will look to put in place measures that protect and improve the status of the water environment.	<ul style="list-style-type: none"> Waterbodies protected and improved WFD waterbodies achieving Good Status/Potential 	NRW	NRW Wildlife trusts Local Authorities Landowners DCWW	Ongoing
	Enforcement: Action to reduce illegal activity on information provided and investigations.	Reduce illegal activity, more fish remain in the system.	NRW	Stakeholders SW Wales Police	Ongoing