



Eden Fisheries Plan THE VISION

The Eden Fisheries Plan will strive to both protect and develop wild, self-sustaining fish populations that can be nurtured by a healthy catchment and continue to be enjoyed by future generations of people

Foreword

The Eden Fisheries Plan was born out of a wide recognition that we need to coordinate and prioritise our resources available for protecting and improving the Eden's wild fisheries and environment. Importantly, the plan will give the angling community a voice on issues affecting the Eden at a catchment scale.

The Eden Fisheries Plan will strive to both protect and develop wild, self-sustaining fish populations that can be nurtured by a healthy catchment and continue to be enjoyed by future generations of people.

From the early stage, the development of this plan has taken into account the concerns of local fisheries stakeholders and combined them with wider national statutory requirements. Socio-economic research on the Eden as a fishery was also conducted, which has helped shape some of the targets in this plan.

A steering group, made up of: River Eden District Fisheries Association (REDFA), Eden Rivers Trust, Environment Agency (EA) and Natural England, was formed to further develop this plan with financial support from the EA and Eden Rivers Trust.

This plan accepts that it can't directly address all perceived threats to our wild fish stocks. Such areas of concern include: threats at sea, and wider water quality and land management issues. It must link and work with other initiatives happening in the catchment and beyond.

Above all else, the plan aims to set ambitious yet achievable targets that will directly benefit the Eden wild fish populations and angling community.

The plan will be regularly reviewed by the steering group, tracking progress on prescribed actions and considering new targets if and when appropriate. An up to date copy of this plan, including information on progress, can also be found at <http://www.edenfishing.co.uk>

This plan acknowledges the support and input from the wider angling community and all four plan partners. The opportunity to make real improvements to our river for the benefit of people and its wild fish populations is both exciting and heart-warming.



A Fisheries Management Plan Steering group will meet three times a year to review overall progress and consider new targets





Eden Fisheries Plan OUTCOMES

2016 Priorities

Future Priorities

As an initial target, a catchment that can support an annual run of at least 11,000 salmon and a rod catch in excess of 1,500 salmon



TARGETS

- Develop a co-ordinated catchment based monitoring & research programme
 - Traps / Electric Fishing/ Counters / Catch Returns / Genetics / Habitat surveys / CL's
- Maximise availability of habitat to our Salmon
 - Audit & Removal / Easement of man-made barriers to fish passage
- Protection & Improvement of Salmonid Habitat
 - Collate baseline habitat data
 - Identify and prioritise habitat improvement opportunities
 - Develop 'Solway Salmon Zone'
- Inform review of salmon conservation bylaws
- Promote voluntary conservation measures

As an initial target, a catchment that can support an annual run of at least 11,000 salmon and a rod catch in excess of 1,500 salmon

In order to be realistic in what this plan can achieve to start with, targets for our Salmon fishery reflect known pressures and concerns relating to salmon in the Eden. These targets may well change in priority in the future, as pressures on our salmon emerge in more detail.

The targets and actions set out a salmon strategy to reverse a ten year decline in rod catch. An integral component of this will be to assess impacts to stocks over the full salmon life cycle, and prioritise monitoring effort at key life cycle migration stages (smolts and spawners). This will result in quantifying stock health, abundance and trends in river and marine survival phases.

Future contingency planning for “what if” scenarios will consider circumstances where recovery of stocks is threatened by unmanageable factors and events e.g. significant climate change, major pollution incidents.

Develop a co-ordinated catchment based monitoring and research programme

In order to manage sustainably the exploitation of salmon by rod and net fisheries in the Eden catchment we first need to better understand the salmon population(s) in it. Ideally we would like to be able to do this for each three of the different key life stages of the salmon – Fry/Parr, Smolts and Adults. One of the key first tasks in this plan is to review and better understand the data we currently have to hand and use it to guide further work. This process may well highlight areas where a more co-ordinated & refined approach to monitoring of different life stages of salmon and associated habitat is required and possible. Detecting a change in something and knowing why it has occurred are two very different things and it is this, depending upon the severity of change, which will help us prioritise research or influence other initiatives taking place in the catchment.

Inform Review Of Bye-laws

One of the powers available to the EA (our statutory body charged with regulating exploitation of salmon stocks within our rivers) is to review and make changes to local (and national) mandatory rules (bye-laws) surrounding management of the Eden salmon stocks. Given that the Eden has failed its conservation limit for consecutive years, the EA have to set measures aimed at halting the decline in salmon numbers. One of the ways for them to do this is to make changes to local bye-laws in order to reduce exploitation by the rod & net fisheries when stock are at a critical level. These measures will continue to be reviewed as appropriate, taking into account the current and future condition of the Eden salmon population, and new, best available scientific evidence surrounding salmon stock management.

Maximise availability of habitat to our salmon

A key way in which we can increase the number of smolts leaving our river is to maximise the availability of habitat to returning adults and subsequent off-spring. The Eden still has a number of significant barriers to both upstream and downstream migration (for multiple species). The impact of these varies from year to year depending upon environmental conditions such as flow, temperature and even the condition of the fish trying to ascend and descend them. Considered in isolation, a barrier such as a weir, may seem just a hindrance. However, couple it with another four weirs, plus a long period of low flows, and an influx of fish predators and the true impact multiplies rapidly.

We intend to identify and prioritise these man-made barriers within the catchment, and where we can't remove, strive to ease fish passage by means of passes. Weirs are also now widely recognised to have a negative impact on how our river functions, in some cases increasing localised flood risk and depriving downstream areas of vital substrate which make up much of our fish habitat. The negative impacts of a degraded river upon our economy is only just being understood.

Protection & Improvement of salmonid habitat

As well as maximising the availability of habitat to our salmon, we want to continue to protect what's good and improve what's not. The first step will be to collate the habitat data we have for the Eden catchment, identify and fill knowledge gaps, and then use the data to help identify and prioritise habitat improvement opportunities.

Additionally, we would like to develop a 'Solway Salmon Zone' which might allow a collaborated approach to managing our salmon (and Sea trout) populations and habitat in the estuarine environment from both the English and Scottish side. This should also potentially create a platform for wider research into pressures being felt by our salmon within the Solway coastal zone, and hopefully place the Solway rivers in a good place to be involved in any wider future marine research projects.

Promote voluntary conservation measures

REDFA, Clubs, and anglers on the river have made important strides in recent years to complete catch returns and adopt stricter conservation approaches to protecting spawning stocks, with a number of progressive Clubs instigating rule changes and restrictions on their waters. Voluntary Catch and Release measures were introduced by REDFA across the whole catchment in 2014 and backed up in 2015 by further restrictions on salmon killed through a carcass tagging scheme.

This was specifically to raise C&R to 90% in the lead up to the Net limitation order (NLO)/Byelaw review in 2017 and harmonise conservation measures to minimise further compulsory Byelaws.

Target	Action	Start Date	Lead Partner/s	Supporting Partner/s	Estimated Cost	Funding Source	Progress Review	Comments
Develop a co-ordinated catchment based monitoring & research programme	Develop accurate methodology and / or identify alternative counter location	2015-2016	EA	REDFA/NE/ERT			Fisheries Monitoring Review undertaken in Spring 2015 to establish who is monitoring what, where and why.	Reduction in core EA funding means reduced fish monitoring effort
	Create annual monitoring report	2016	ERT	EA/REDFA/OTHER			Agreement to collate Eden monitoring data in one annual "state of Eden" report	Opportunities to increase monitoring efficiency and accuracy being explored by EA & ERT. EA exploring viability of external use of EA smolt traps
							ERT considering fish counter options within RRS projects	
	Review current CL methodology and run data and Identify opportunities for improving accuracy	2015-16	EA	REDFA/NE			EA led review in progress	
	Identify scope for, and opportunities to complete salmon genetics study started by EA	2016+	EA	REDFA/NE/Scottish bodies	100k+			Essential information in understanding stock structuring in the Eden catchment and how these relate to neighbouring rivers
Inform Review of Bye-Laws	Review Eden and Solway Bye-Laws and NLO	2015-17	EA	NE/REDFA/HAAF NETTERS			EA led review in progress	
Promote Voluntary Conservation Measures	Promotion and development of C&R and Tagging scheme	On going	REDFA	EA			REDFA introduced voluntary C&R guidance and salmon carcass tagging scheme in 2014	
Maximise availability of habitat to our Salmon	Barrier Audits and removal/ easements	2015-2017	ERT/EA	NE/REDFA			Major barrier removal feasibility studies included in RRS Funding for barrier audits and easements being identified	
Protection & improvement of Salmon habitat	Collate river habitat data – Identify knowledge gaps and prioritise habitat data collection	On going	ERT/EA	NE		UU & The Oglesby Charitable Trust	NE commissioning habitat assessment of some SAC stretches of the Eden ERT undertaking walk over surveys of 5 Eden tributaries	Also refer to specific Eden WFD failing water bodies
	Using habitat data, identify and prioritise areas for habitat improvement	2016-18	ERT/EA	NE			SAC data Feeding into 6 yr. river restoration (RRS) strategy being delivered by ERT	
	Develop a 'Solway Salmon and Sea trout Conservation Zone'	2016+	EA/ERT	NE/REDFA			Discussion to be initiated/progressed with other Trust's and DSFB's	EA has already developed some links with Scottish Trusts and DSFB's

A 'WORLD CLASS' WILD TROUT FISHERY



TARGETS

- Protection & Improvement of Salmonid Habitat
- Maximise habitat availability to our Trout
 - Audit & Removal / Easement of man-made barriers to fish passage
- Develop a co-ordinated catchment based monitoring & research programme
 - Traps / Electric Fishing/ Counters / Catch Returns / Genetics
- Promotion of 'Catch & Release'
- Cessation of trout stocking

A ‘world class’ wild trout fishery

The River Eden is renowned amongst trout fishers for the quality of its wild trout fishing. The ambition is to raise this further by working towards a number of deliverable targets. By raising the standard of wild trout fishing in the Eden we hope to raise awareness of the importance of the species, both ecologically and economically.

Maximise habitat availability to our Trout

Barriers to migration is as equally important for trout as it is for salmon. Our trout are often overlooked as they tend to prefer upper reaches and minor tributaries for spawning where barriers are present in more secluded and rural areas, ‘out of sight – out of mind’, in the form of culverts and small weirs. The same goes for actual physical loss of habitat as a result of historical re-alignment and culverting carried out as part of land drainage works.

Protection & improvement of Salmonid habitat

As well as maximising the availability of habitat to our trout, we want to continue to protect what’s good and improve what’s not. With exception to our Sea trout, the Brown trout remain within the river for their entire life. This means the habitat condition is crucially linked to each life stage. The first step will be to collate the habitat data we have for the Eden catchment, identify and fill knowledge gaps, and then use the data to help identify and prioritise habitat improvement opportunities. We aim to deliver some of this habitat improvement work by developing opportunities and resource for voluntary participation in such work – it is vital that we become more pro-active and take ownership of some of the work that’s needed.

Develop a co-ordinated catchment based monitoring and research programme

In order to sustainably manage the exploitation of trout by rod and net fisheries in the Eden catchment, we first need to better understand the fish population. Ideally we would like to be able to do this for each three of the different key life stages of the salmon – Fry/Parr, Smolts (Sea Trout) and Adults. One of the key first is to review and better understand the data we currently have to hand and use it to guide further work. This process may well highlight areas where a more co-ordinated & refined approach to monitoring of different life stages of trout and associated habitat is required and possible.

Trout are not a designated SAC species in the Eden and unfortunately do not attract the same degree of regulatory attention as salmon (a requirement of the EU Habitats Directive 2000), therefore we need to co-ordinate efforts in the catchment to better use resources and improve catch return data. In addition to the information we already collect on our trout as part of a monitoring programme, we will also identify areas of research needed to fill knowledge gaps in order to progress actions deemed essential to improvements for our trout. Sea Trout in particular come to mind when considering our current lack of understanding of the Eden trout populations.

Promotion of catch and release

As part of a sustainable fishery we need to promote the benefits of catch and release (C&R). To do this we intend to organise a workshop and disseminate information on benefits of C&R and safe handling.

Cessation of trout stocking

Stocking of hatchery-reared trout was quite common place fifteen years ago, but through a more enlightened, conservation-minded approach the River Eden has returned to being an exclusively wild trout fishery. To fully achieve our desired outcome of ‘A World Class Wild Trout Fishery’ we would like to work towards establishing a zero stocking policy for the Eden. If there are issues limiting our trout population, we will focus on identifying those bottle-necks in their lifecycle and address the cause, rather than mitigate for them.

Target	Action	Start Date	Lead Partner/s	Supporting Partner/s	Estimated Cost	Funding Source	Progress Review	Comments
Protection & improvement of Salmonid habitat	Collate river habitat data – Identify knowledge gaps and prioritise habitat data collection	2015	ERT	EA/NE		UU & The Oglesby Charitable Trust	NE commissioning habitat assessment of some SAC stretches of the Eden ERT undertaking walk over surveys of 5 Eden tributaries	ERT accessing EA funds for riparian protection on Trout Beck following walk-up survey
Maximise availability of habitat to our Trout	Barrier Audits and removal/ easements	2015	ERT/EA	NE/REDFA			Major barrier removal feasibility studies included in RRS Funding for barrier audits and easements being identified Dialogue opened with Highways Agency	River Restoration Strategy (RRS) is being delivered by ERT to restore natural processes to the River Eden to protect and improve the Eden SAC. This will benefit a range of biodiversity. ERT & EA working with Highways on their own barriers project
Disseminate current monitoring data on trout	Create annual monitoring report	2016		REDFA/EA/OTHER			Monitoring review held in Spring 2015 EA have core trout monitoring sites. ERT reviewing own electro-fishing programme rationale.	
	Establish research priorities for Brown Trout and Sea Trout	2016+	EA	ERT/REDFA/Solway Trusts			There is a need to establish current exploitation rates of sea trout and apply similar protection as salmon receive Establish maturation size and fecundity of brown/sea trout and consider bye-law creation where necessary?	The Brown Trout / Sea Trout is a Section 41 Priority Species under the NERC Act 2006 – Would suggest this to be fairly high on future priorities for Trout section This is in line with the EA’s National Trout & Grayling Fisheries Strategy (Policy 9) Build on finding’s from Sea Trout symposium
Promotion of catch & release	Organise workshop and disseminate information on benefits of catch & release and safe handling	2016	REDFA/EA	ERT			REDFA to re-organise workshop originally scheduled for 2015	
Cessation of trout stocking	Work towards a zero trout stocking policy for the Eden to support outcome of A ‘World Class’ <u>Wild</u> Trout Fishery	2016+	EA	REDFA			Identify current situation	This is in line with the EA’s National Trout & Grayling Fisheries Strategy (Policy 15) and the UNEP Rio Declaration 1992.

Improve our understanding of Eden's Grayling & Coarse Fish Populations



TARGETS

- Understand factors limiting Eden Grayling & coarse fish populations
 - Pilot winter grayling and coarse fish days
 - Pilot grayling anglers log book
 - Map coarse fish species and distribution

Improve our understanding of Eden's Grayling and coarse fish populations

The Eden is becoming increasingly well-known as a winter Grayling fishery and historically its coarse fishing for Dace and Chub was renowned. Coarse fishing still takes place within the Eden and Ullswater, albeit at a much reduced level. There is potential for developing wider coarse fishing venues and opportunities with the added benefit that these act as the nursery streams for our young anglers.

Potentially, a great selling point of the Eden as a fishery is all-year-round fishing for a variety of species. This offers anglers a variety of options in fantastic surroundings when considering the Eden as a fishing destination which can only be positive for fisheries and the local tourist economy. We have set out an initial target that will help us work towards this ambition.

Understand factors limiting Eden grayling and coarse fish population

Given the lack of current concise information on the state of our coarse fish population we aim to first better understand factors limiting our coarse fish population by collating existing data, gather new data on distribution (including mapping out species distribution), and report on this.

Development and promotion of Eden as an affordable, accessible and wild fishery

This particular target is aimed specifically at developing a strategy to promote the Eden as a fishery, highlighting what it can offer in terms of year round fishing, multiple species and spectacular scenery. It will include linking into the development of an annual magazine and website (see next section).

Target	Action	Start Date	Lead Partner/s	Supporting Partner/s	Estimated Cost	Funding Source	Progress Review	Comments
Understand factors limiting Eden grayling & coarse fish populations	Pilot winter grayling and coarse fish days	2016+	REDFA	ERT			Identify agreeable fishery owners and obtain access consents	
	Pilot grayling anglers log book recording scheme	2016+	REDFA					
	Map known distribution	2016-17	REDFA	ERT			Additional advice being sought from Borderlines	
Development and promotion of Eden as an accessible, affordable and wild fishery	Promote Eden as accessible, affordable and available fishery via development of media and publicity programme	2015+	ERT	REDFA/EA			ERT is developing a communications strategy Proposed Fish Eden magazine will help deliver this action	

A KNOWLEDGEABLE, ENGAGED & RESILIENT ANGLING COMMUNITY



TARGETS

- Increased club participation in habitat restoration and fisheries improvement projects
 - Restoration projects
 - Fish friendly pro-active management of beats
- Increased angler participation in fisheries data collection and monitoring
 - Electric-fishing / AMI / Log Books/ Catch returns / River Fly
- Support REDFA avian predator count & Area management measures
- A network of resilient, viable and vibrant fishing associations
 - Build upon 2014 Eden economic angling survey findings
- Sustainable Club & Riparian financial support of the EFP (REDFA / ERT)
- Develop closer working relationship with local agencies, develop universal approach to work impacting upon fish habitat/ access
- Establish industry partnerships with tourism sector
- Develop a Social Angling network
 - Annual magazine, website
 - Fly-tying / films / awareness / site visits

A knowledgeable, engaged and resilient angling community

Anglers can play an influential role in the wider health of our rivers through active participation in river and community events. Many clubs are seeing and experiencing an increasing ageing membership profile and falling membership as young anglers are not attracted into the sport. The viability of clubs is at stake as revenue is eroded due to reduced numbers of anglers, but also indirectly through discounts that are applied to senior anglers. New anglers and young recruits are needed to stem this decline and engage more fully with the local community to balance a less tolerant attitude towards field sports by the public at large.

Increased club participation in habitat restoration and fisheries improvement projects

Increasing club member participation in habitat restoration and fisheries improvement projects is key to delivering habitat improvements on the Eden. Not only will this help get the work done, it will provide opportunities for learning new skills and become more knowledgeable about the river and its wildlife. Opportunities will be developed for participation in projects being delivered by other organisations and the offer of site visits and advice by the EA, ERT and Wild Trout Trust will be promoted, allowing clubs to actively carry out and manage habitat improvement projects themselves.

Increased angler participation in fisheries data collection and monitoring

Given the lack of funding available for, and sheer logistics involved in, monitoring of our fish stocks/data collection for specific research projects, it will be essential to draw upon volunteer effort amongst the angling community. Again, this will also create opportunities to learn new skills and become more knowledgeable about the river. This will ultimately mean anglers are more connected to the sustainable management of their quarry species.

Support REDFA avian predator count

REDFA, with support from the Angling Trust and NE, currently co-ordinate avian predator counts along the River Eden in order to better understand their impact on fish stocks. This scheme is largely delivered by volunteers and provides information essential to managing the impact of birds, such as cormorants, on the Eden fish stocks. It is particularly relevant for highlighting the impact of weirs, where large numbers of smolts congregate making them an easy target for predators. The impact of this is twofold – leading to direct loss of stocks, as well as secondary infections as a result of injuries and associated stress.

A network of resilient, viable and vibrant fishing associations

As already alluded to, angling as a pastime is not currently being taken up by younger generations in numbers sufficient to safeguard some clubs' futures. A socio-economic study, looking at angling on the Eden, commissioned by the REDFA in 2013 as part of this plan's development process highlighted a number of areas that we could work on to maintain more resilient, viable and attractive angling clubs. We intend to start building upon these findings in the coming year.

Sustainable club and riparian financial support of the Eden Fisheries Plan

With less core public funding available for fisheries conservation work, it is essential that REDFA and Eden Rivers Trust are able to drive forward and deliver many of the targets in this plan. Targets laid out that REDFA are leading on will not be realised at the rate desired unless continued financial support for them is achieved. The same applies to Eden Rivers Trust whose fisheries funding is very limited, although they can use small amounts of charitable funding to secure bigger funding bids. This is fundamental to how Eden Rivers Trust have been able to maintain its presence and deliver increasingly large conservation projects that benefit fisheries in the Eden catchment. Funding asks will be clearly defined, linked to actions and will combine with funding streams from elsewhere.

Develop closer working relationship with local council and highways agency to develop universal approach to works impacting upon fish habitat and access

As responsible bodies carrying out work that can impact upon the Eden's fish habitat and access, we would like to work closer to find solutions to work and structures negatively impacting our fish population. This will range from developing innovative solutions, to raising awareness about preventable impacts.

Establish industry partnerships with tourism sector

In order to promote the Eden's wild fisheries, we want to establish better links with the tourism sector. This will range from working with Tourist Boards to promoting the Eden as a desirable destination, to developing angling packages with accommodation providers, strengthening the economic links between Eden's fisheries and the wider tourism industry.

Develop a social angling network

With snippets of news focusing on conservation limits and measures, it is easy to focus too much on negative issues, or even become frustrated over lack of knowledge surrounding some issues. We would like to develop an annual magazine and supporting website that will underline what the Eden Fisheries Plan is achieving and where we are struggling to reach desired targets.

It would also provide a great platform to celebrate everything great about the Eden and its fisheries, potentially reaching out to the wider community and raising the awareness of issues being faced in the river but also angling and voluntary opportunities present. It will also provide a platform to present an annual monitoring summary - which we know there is demand for.

Additionally, we would like to build upon the workshops and site visits that have already been offered to the angling community, particularly focusing on fun social and awareness events, whenever possible making them happen on, or next to the river with perhaps a visit to the local pub afterwards to discuss the finer points of angling.

Target	Action	Start Date	Lead Partner/s	Supporting Partner/s	Estimated Cost	Funding Source	Progress Review	Comments
Increased club & angler participation in habitat restoration & protection	Co-ordinate and offer habitat improvement site visits, and promote pro-active fish friendly beat management	2015-17	REDFA/ERT		EA/REDFA	Cherish Eden RRS	Wild Trout Trust & ERT carried out site visit to Kirby Stephen Angling Association	Wild Trout Trust has written report suggesting where club could make improvement to river habitat. ERT looking into funding opportunities.
	Support angler participation in river restoration & protection		ERT				ERT offering invasive plant control training and equipment to REDFA members	Offer made at January REDFA GPC meeting. No uptake as of April 2016
	Continuation and support of River Fly monitoring scheme		ERT				ERT exploring options for using River Fly to monitor river restoration projects	Co-ordinator attending training event
Increased angler participation in fisheries data collection	Continued development of catchment wide catch return system led by REDFA	2016+	REDFA	EA				REDFA currently collate catch data from 20+ salmon fisheries and provide monthly rod and C&R stats.
	Increased participation in field data collection through activities such as; Electrofishing, Redd counting, fish trapping and log books	2016+	ERT/EA	REDFA			ERT developing variety of volunteer activities	Is there actually a genuine desire from anglers to do more of this? Is this something REDFA has put to members? Perhaps more interest from anglers to get involved in specific project fieldwork?
Support avian predator count project	Continued support and development of project	Ongoing	REDFA	NE/Angling Trust			REDFA along with Angling Trust support are continuing to develop this project	
A network of resilient, viable and vibrant fishing associations	Build upon Eden 2014 Angling socio-economic survey findings	2016+	REDFA	EA/ERT		Angling Trust, Sport England, Active Cumbria	In 2016 Focus on <ul style="list-style-type: none"> Improve provision of Information with support from REDFA Develop Junior angling events 	This is on top of what is currently done in the catchment.
	Dissemination of findings to key socio-economic stakeholders							
Develop a social angling network	Create annual magazine and website	2017	ERT	REDFA/EA/NE			In discussions with a media group over design and publication	Aspiration is for annual magazine to be platform for fisheries plan, annual state of Eden report summary and Eden angling articles. Put on hold for a year due to lack of funding. Review then and consider funding bids.
	Develop a annual programme of social and informative events	2015>	REDFA	ERT/EA			REDFA to reschedule Catch & Release workshop	Confirm all and organise for 2016
							ERT offering site visit to DTC project site. To be organised with REDFA.	
							EA to organise red counting workshop	
Development and promotion of Eden as an accessible, affordable and wild fishery	Promote Eden as accessible, affordable and available fishery via development of media and publicity programme	2015+	ERT	REDFA			ERT is developing a comms strategy Fish Eden magazine proposed will help deliver this action	