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International Conference on Engineering and Ecohydrology for Fish Passage 2015

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# Session C2: Eel Recovery – It is not Just About Fishing

Andrew Kerr Sustainable Eel Group

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# Eel Recovery – it is not just about fishing

Fish Migration Conference
22nd June 2015
Holland





# The Sustainable Eel Group

- SEG building the Network of collaboration
  - -With Science
  - With Conservation (NGO's)
  - -With the Fishery and Industry
- SEG and Blocked Migration Pathways
  - Scale of the challenge
  - -Latest from SLU in Sweden
- SEG What next?





# **SEG's Objectives**

### **Accelerating the Eel's Recovery**

- To help deliver the objectives of the EU Eel Regulation
- To develop, decipher and apply sound science to inform effective decision making
- To Influence policy makers at UK and European Levels
- To encourage well regulated and sustainable fisheries that support local economies and communities
- To promote greater public understanding of the eel
- To be effective at seeking income and resources to progress the aims of the group



A Rivers Trust and EA Solution on the Severn



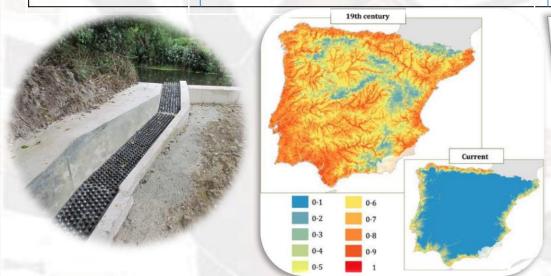


The UK Minister Presents SEG's 5<sup>th</sup> Anniversary Achievement Awards for sustainability to eel leaders from Science, Conservation and the Industry.



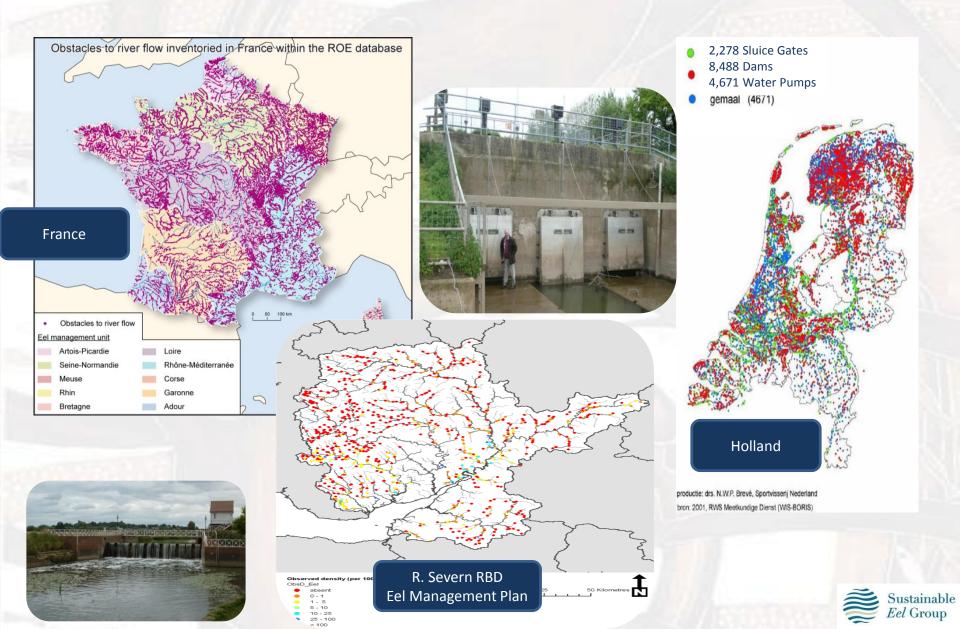
# Eels need our help

Objectives	Long term measures	Emergency measures
Increase recruitment in	<ul> <li>Unblock migratory         pathways in</li> <li>Reduce eel mortality</li> </ul>	• Glass eel restocking / translocation with fishermen
Increase escapement out	<ul> <li>Unblock migratory         pathways out</li> <li>Increase Escapement</li> </ul>	• 'Eels over the barriers' with fishermen





# Help Eels to 'get in'





### Type: Eel trapping kit



Eel Pass, Arzal dam Vilaine river



Estuarine eel ladder with counting facilities using modular eel ladder.

Eel ladder left bank



### Vilaine Atlantic France

2010 0.5m

2014 5.58m

'best since 1996'

"We all know this works so

why aren't we doing it?"

### Eel ladder right bank

Arrial	1996	1997	1996	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Glass eel Nb	13960ED	20000	2474000	BEOD	38671	28507	52128	200002	26362	106480	719704	30034	396732	170124	2567	9339,1	150000	292023	52079AB	>1710
Elvernb	15553	1814	34177	23546	144(5)	6572	7215	9449	5905	881	15046	15669	57894	71504	20360	4513	13454	145000	78400	> 0.5 X 10
total	1411550	717514	3498177	923646	318110	340079	50343	289481	30267	107531	734750	305903	454126	241708	54027	13627,1	159454	3007023	54763图	

After a very bad recruitment in 2011. The count of glass eel and elvers increase, the last two years are the best one since 1996 (2014 partial count).

Fish-Pass

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	2014 (million)	2013 (million)				
Germany	20	15				
France	23	12 4 3 3 2 1				
UK & Ireland	15					
Sweden	3					
Holland	12					
Denmark	2					
Belgium	1					
Czech Republic	5					
Poland	3					
Estonia	3					
Others	4	3				
Total	90+	40+				

**Juvenile Eel translocation an Emergency Measure** 

Sustainable

Eel Group

# SEG only supports sustainable and legal fisheries that meet the Standard

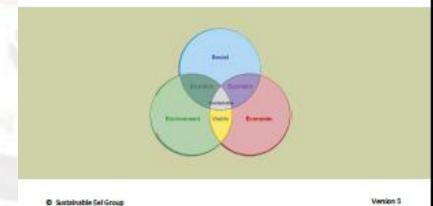






### The Sustainable Eel Standard





www.sustainableeeigroup.com

### The aims of the Sustainable Eel Standard:

- Operators can demonstrate their high standards and commitment to sustainability
- Encourages high and responsible standards through the supply chain, from fishery to market
- Encourages sustainable practices and market. Discourages unsustainable practices and
- to buy responsibly Part of the solution for sustainable management of the sel in Europe



Version 5 21 June 2013



The mature Standard released at the 2013 Conference. It builds on the experience of 50 assessments. SEG will continue to consult, review and improve.

21 Ame 2013

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www.sustainableeeigroup.com

# **ISEAL Credibility Principles**

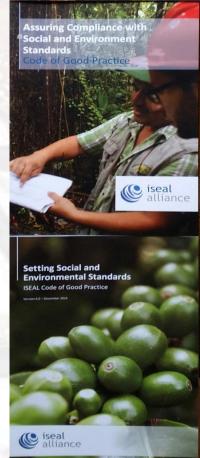
written into the three Codes

- Setting Environmental Standards
- Assuring Compliance
- Assessing Impacts









## Help eels to 'get out'......





25,000 Hydropower stations & many 10,000's water pumping stations are killing hundreds of thousands of mature eels each year

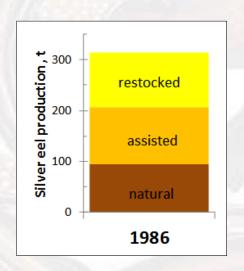


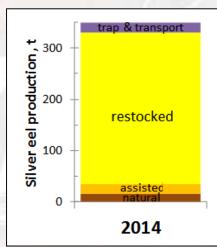
### Latest Report from SLU Sweden on progress with EMP Dekker / Wickstrom – the Freshwater situation

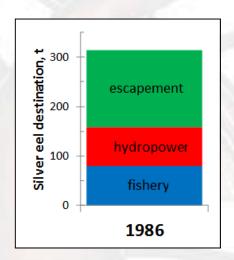
# **Eels In**

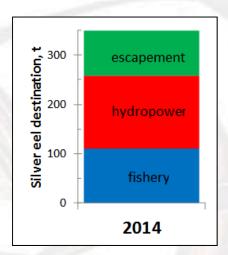
'Every time I see this plot I am surprised how important restocking has become in Sweden and how much the composition has changed' Willem Dekker 8th June 2015

**Eels Out** 









'The fishery has a double role and hydropower the main mortality but the bottom line is hydropower provides the main money so RESTOCKING, FISHERY HYDROPOWER are all interdependent'
Willem Dekker 8<sup>th</sup>
June 2015



## **European Commission's Report to Parliament 24<sup>th</sup> October 2014**

"Progress was made in implementing management measure related to fisheries but that other management measures, such as improving habitats, combating parasites or predator control have often been postponed or only partially implemented."

"More attention should be given to management measures related to these non-fishing anthropogenic mortality factors, the majority of which has only partially been implemented by Member States."

"Non-fishing anthropogenic mortality factors **include hydropower and pumping stations, habitat loss** or degradation, pollution, diseases and parasites."





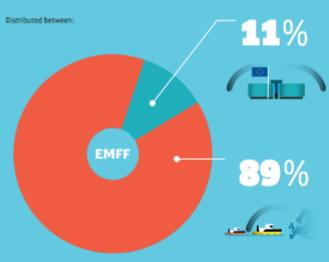
European Commission

# The European Maritime And Fisheries Fund 2014-2020

To help fishermen adapt to sustainable fishing, create jobs for the sector and diversify economies in coastal

The EMFF assists Member States to co-finance operational programmes and projects, to reach the objectives of the reformed Common Fisheries Policy.

It is one of the five European Structural and Investment Funds which complement each other to deliver more jobs, welfare and growth in



# Managed by the European Commission

To support EU-wide objectives in maritime and coastal affairs:

International governance

Cooperation through exchange of information and best practices Public information and support to networking platforms Marine Knowledge

Maritime Spatial Planning

### Managed by the member states

Divided amongst EU countries, the funds are used for:

Reducing impact of fishing on the marine environment More market tools for professionals and consumers Joint stewardship of protected areas and Natura 2000 sites Special support to small-scale fishermen

Among which:



### Sustainable Fisheries

Making fisheries and aquaculture more sustainable and profitable:

Ensuring and creating sustainable jobs Local development and support to fisheries areas Marketing and processing



### Control and Enforcement

To monitor compliance with the European Common Fisheries Policy and protect a fair access to healthy stocks:

Access to fishing grounds Controlling fishing effort, TACs Other technical measures to improve selectivity and sustainability





and the long term management of our areas such as:

Understanding and monitoring of commercial species Dynamics of single stocks and Ecological modelling of regional basins



### Blue Economy

To collect the data the scientists need To unlock sustainable growth and job to improve our knowledge of the seas creation from our seas and oceans, in

> Maritime surveillance (CISE) Improved knowledge of the seas and

Enabling rational exploitation of new marine resources (e.g. energy, biotech)

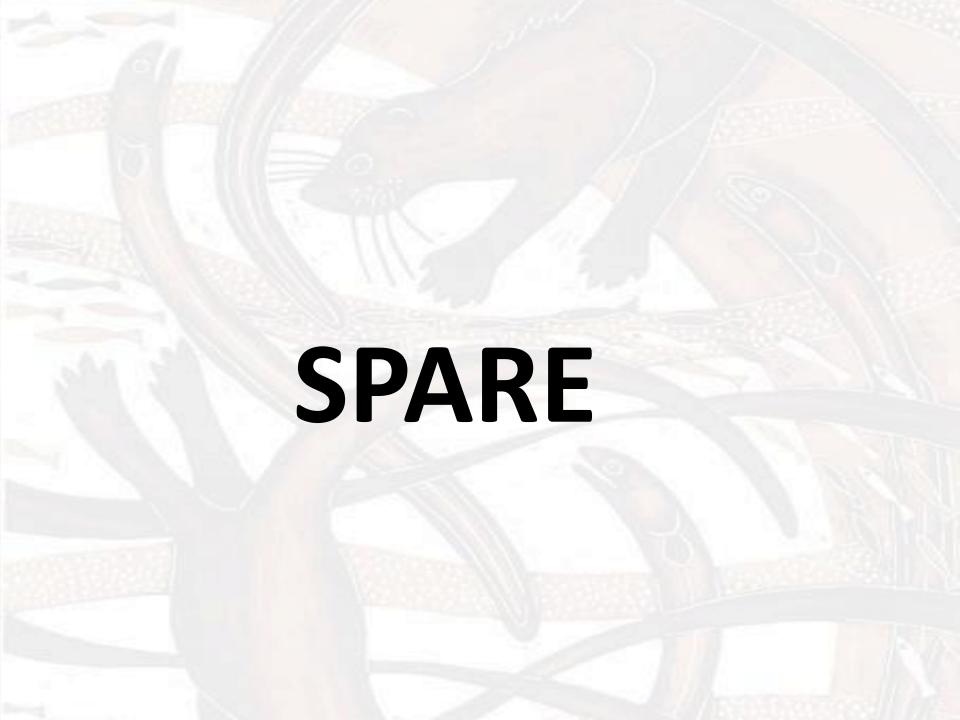
## Investment opportunity to fund solutions



# SEG the Focus Points – it is not just about fishing

- More of the Same in partnership
  - Unblock the migration pathways across Europe
  - Build conservation projects in partnership
  - Tell the whole eel story
  - Only support the fishery & industry where the SEG Standard is met
- More and better measurement at all life stages
- Make the 60/40 happen
- End the Poaching, illegal / criminal trade
- Achieve the 40% Silver Eel escapement









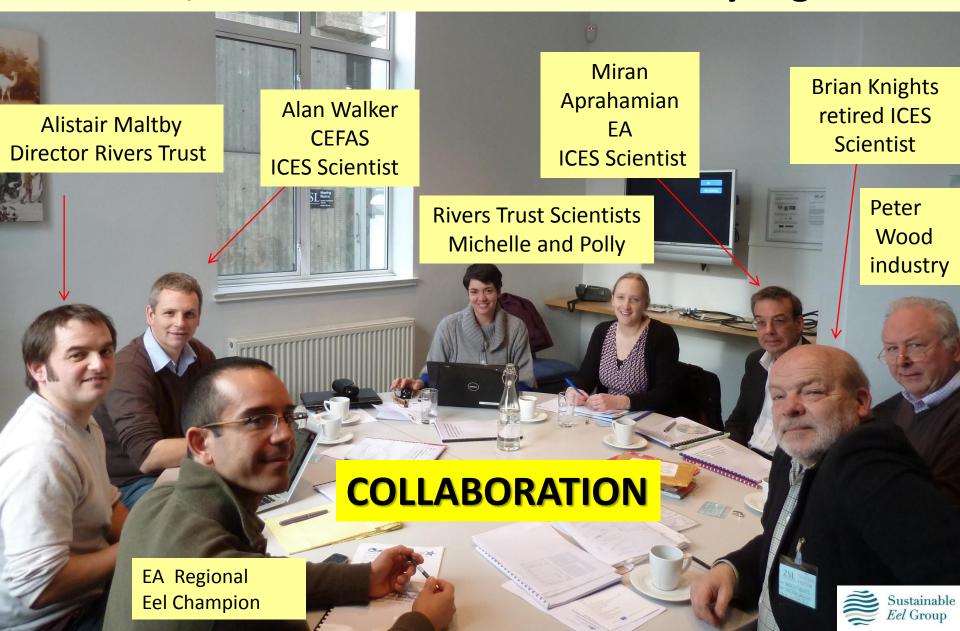


# Unblocking the migration pathways has started....so much more is needed



# The Eel Habitat sub Group meeting at ZSL

### Science, Conservation and the Industry together



"At this point SEG does not have any fishery independent data for 2015 and the 5 year rolling average gives the best guide to trends as natural conditions especially water temperature and volume have a huge impact on productivity.

For France the fishing boats have been reduced by more than a half and in 2015 some 26 tons plus were caught say **75 to 100 million fish.** 

For England the fishery will not match the 2013 and 2014 seasons which were the best for decades. The 2015 data is being collated and is likely to be at the same levels as the 2012 and 2011 seasons and definitely better than the very low recruitment of the period 2005 to 2010. The range is 7 to 10 million fish.

Typically France catches 10 times England."

A short statement would be

"Over 100 million were caught this year. Levels were comparable to the 2011 and 2012 seasons and better than the lows of 2005-2010"

