Eel Assessment – River Severn Basin, UK, Glass Eel Fishery

Assessment against:

Component 1: Generic Requirements
Component 2: Glass eel fisheries
Component 7: Traceability

Completed by
Alex Senechal

29th March 2018

FINAL

1. Introduction

This document represents the report completed following the 2018 audit carried out under the Sustainable Eel Standard (Version 5, 21st June 2013), and Sustainable Eel Methodology (Version 1, 21st June 2013) against the River Severn Basin Glass Eel Fishery. This assessment has been completed against Components 1, 2 and 7 of the Standard only.

The assessment is of a hand net elver fishery located in the River Severn Basin only. The area is defined by the UKs River Severn District Eel Management Plan. It consists of an area of 21,590km² and includes a total River length of over 7,000km. The main rivers located in the basin and of importance for this assessment are the River Severn, Wye, Usk and the Welsh Valley Rivers (Rhymney, Ebbw, Taff and Ely). Only elvers caught (by hand-net) from water bodies within the River Severn Basin can be considered as covered by the area of this assessment. The elver fishery in the Severn Basin has been operating for generations and consists of a hand net fishery only (no boat fishing is allowed for elvers). The season runs between the February and the May only with all fishermen required to be licenced by the Environment Agency (EA) and to follow the byelaws as set out by the EA. Most eels caught by fisherman from this area and the South West are sold to UK Glass Eels, located near Gloucester.

2. The assessment

The assessor was Alex Senechal of MacAlister Elliott and Partners Ltd, who visited the River Severn Basin elver fishery on the 29th March 2018. The audit included interviews with River Severn basin fisherman and staff at UK Glass Eels to assess the quality of fish sold from the basin. The auditor visited several locations along the River Severn to observe fishing and discuss the fishery with fishermen and the method used. This was through the traditional use of a hand net and a drag net along a section of sea wall. Both methods involve glass eels swimming into the net rather than being trawled in the net. Therefore, the method is to be considered passive.
The fishery audit is organised by Mr Peter Wood of UK Glass Eels Ltd (the vivier for the region) and he acts as the client contact for this assessment.

3. **Client Contact Details**

<table>
<thead>
<tr>
<th>Client Contact Name</th>
<th>Mr Peter Wood</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Client Address</strong></td>
<td>UK Glass Eels Ltd, Over Causeway, Over, Gloucester, GL2 8DB</td>
</tr>
<tr>
<td><strong>Client Email</strong></td>
<td><a href="mailto:peterwood@glasseel.com">peterwood@glasseel.com</a></td>
</tr>
<tr>
<td><strong>Client Phone Number</strong></td>
<td>Office +44 1452 529993</td>
</tr>
</tbody>
</table>

4. **Results of the assessment**

The outcome of this assessment is as follows;

The River Severn Basin glass eel fishery has passed Component 1: Commitment to Sustainability and legality

that the River Severn Basin glass eel fishery scored **7 green scores** and **2 Amber scores** against Component 2 and therefore **should be considered sustainable under the SEG standard**, Component 2: Glass Eel Fisheries.

that River Severn Basin glass eel fishery scored **4 green scores** against Component 7: Traceability and therefore **should be considered sustainable under the SEG standard**, Component 7: Traceability.

5. **Next Audit**

At the completion of the audit the client was assessed against the risk assessment set out in the Methodology. This is set out in the table below.

<table>
<thead>
<tr>
<th>Question</th>
<th>Performance of Client At Audit</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Has the client been part of any <strong>external investigation</strong> which may be of concern to SEG AND/OR been <strong>suspended from any other certification standard</strong>?</td>
<td>Enhanced Surveillance</td>
<td>Go to Q2</td>
</tr>
<tr>
<td>2</td>
<td>Has the client received a borderline pass(^1) for a Component in its previous audit?</td>
<td>Enhanced Surveillance</td>
<td>Go to Q3</td>
</tr>
<tr>
<td>3</td>
<td>Does the client only buy and sell product (does not physically handle it?)</td>
<td>Minimum Surveillance</td>
<td>Go to Q4</td>
</tr>
<tr>
<td>4</td>
<td>All other scenarios</td>
<td>Standard Surveillance</td>
<td>Go to Q5</td>
</tr>
</tbody>
</table>

\(^1\) A borderline pass is considered a pass that occurs when one less amber indicator is received then would be required to fail (i.e. 5 Green indicators and 4 Orange indicators) or when a company is certified with equal number of orange and green indicators.
As the client has been seen to fall into the Standard Surveillance bracket, the next audit will be due on the 29th March 2020 (in 2 years’ time) and shall be an on-site audit.

The tables below give the standard and a rationale for the score given. The score is highlighted in the appropriate colour

1. **Component 1 - Commitment to Sustainability & Legality**

<table>
<thead>
<tr>
<th>Component 1 - Commitment to sustainability &amp; legality (See Note 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>green score indicator</td>
</tr>
<tr>
<td>red score indicator</td>
</tr>
</tbody>
</table>

**Discussion**

The River Severn Basin glass eel fishery has continued to improve its practices in order to be well aligned to the SEG Goals. The fishery is managed and regulated well by the Environment Agency with the resources available and uses only the sustainable hand net method of fishing.

The fisheries have shown limited prosecutions for illegal activity in the 2018 season despite medium-high levels of monitoring by the regulator.

**Score**

A Green score is provided

2. **Component 2: Glass Eel Fisheries**

1. **The management target (40% escapement or otherwise) is being achieved (See Note 2)**

Weighting: 2
The Eel Management Plan is approved and there are good data which show with reasonable confidence that the EU silver eel escapement target is being achieved in the eel management district.

The Eel Management Plan is approved and there is evidence that it is being implemented.

The Eel Management Plan is not approved AND/OR there is little evidence of it being implemented AND/OR key parts of it are not being implemented AND/OR there is strong evidence of widespread non-compliance which is undermining implementation.

Discussion

These fishery on the Severn is supported by the Severn River Basin District. The Eel Management Plan was approved and published in 2010 and updated in 2015.

For the Severn RBD Eel Management Plan, the situation remains much the same with the 40% escapement target not being met presently. However, the recent Draft UK NDF Paper submitted to the EU CITES Scientific Review Group indicates that there is good confidence that modelling of glass eel quantities entering the river is surplus to what is required for a healthy river. In the case of the Severn, Method 1 indicated a surplus in the river based on the average catches of 2015-2017, and the more conservative Method 2 (based on B₀ silver eel equivalent), also indicated a surplus for the river.

While the 40% escapement of silver eels has not been achieved yet by the RBD for the Severn, the evidence provided for estimated quantity of surplus glass eels entering the river indicates that the component elements of the management plan have been implemented and that they are having a positive effect. Therefore an Amber score is justified here.

Score

An Amber score is provided

2. The fishery is well-managed (See Note 3)

Weighting: 2

Fishers are licensed and provide logbook data AND data on catch and effort are collected and analysed regularly by the management agency (at least annually at the end of the season), AND data are made available to the management agency at any time if required AND data are considered to be accurate, useful for statistical purposes and provide a comprehensive picture of the glass eel fishery under assessment AND fishermen only use legal gear AND enforcement is in place throughout the fishing area with no evidence of systematic non-compliance.

Fishers are licensed AND data on catch and effort are collected and analysed regularly by the management agency (at least annually at the end of the season) AND data are considered to be accurate and provide enough information on the glass eel fishery under assessment for management and to track annual trends in glass eel arrival AND fishermen only use legal gear AND there is no evidence of systematic non-compliance.

There is evidence of illegal fishing that may adversely affect the fishery AND/OR data are not collected on catch and effort AND/OR data are too inaccurate or partial to provide enough information for management AND/OR there is evidence of systematic non-compliance in the fishery (e.g. widespread use of illegal gear, misreporting of catches, failure to respect quotas, closed periods or other...
**Discussion**

The fishery in the River Severn Basin for glass eel fishery is fully licenced through the Environment Agency whereby all fishers must apply for a licence each year. A new system where by the licence number remains the same each year was introduced before the last season however; all fishers are still required to renew the license before each season commences. The fishery has a set season and is continually policed by the EA river bailiff system. This includes regular bailiff activity (with thermal imaging capability), and additional resources when required and justified. Since the last audit, prosecutions have continued to decline in number.

All licenced fishermen are required to provide catch data to the Environment Agency on a seasonal basis. Failure to do so can result in a fine and rejection for a new licence the following season. As a buyer of glass eels, UK glass eels are also required to provide catch data to the EA for all elvers bought at their facility. This means that when fish are brought to the facility, valid licences are checked, noted and the catch purchased are attributed to the individual licence number.

Gear used for the fishery must meet the regulation set by the EA. Licensed gear is required to carry a tag provided by the Environment Agency and gear should be held at all times (although this is not necessarily the traditional way) However, it is intended that this is to ensure that nets are not staked and left in the water for extended periods and so that multiple nets are not used by one individual at any given time.

Catch data is recorded by both the fisherman and buyers, providing a verification opportunity to ensure that more accurate recording of catches is achieved. As Glass Eels UK are responsible the the majority of elvers purchased in the UK, the accurate records maintained by this business provide a good source of data for the quantity of elvers caught.

<table>
<thead>
<tr>
<th>Score</th>
<th>A Green score is provided</th>
</tr>
</thead>
</table>

**3. Mortality during fishing is minimised** (See Notes 4 & 5)

**Weighting:** 2

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria</th>
</tr>
</thead>
</table>
| **green score indicator** | Fishing is by hand-held nets OR fishing from vessels meets the following criteria:  
 i) fishing is at slow speed (anchored in current or speed of no more than 1 knot relative to water);  
 ii) haul duration is on average no longer than 20 minutes, with the maximum duration not more than 30 minutes;  
 iii) mesh size of cod end no greater than 1mm  
 iv) rest of the net designed such that glass eels do not become trapped or abraded;  
 v) vivier tank on board and in use; AND fishermen can demonstrate that the mortality rate of the catch over the duration of holding in the storage facility is ≤4% for each batch captured. |
| **amber score indicator** | Fishing from vessels meets the following criteria:  
 i) fishing is at slow speed (no more than 1.5 knots relative to water);  
 ii) maximum haul duration no longer than 30 minutes;  
 iii) mesh size of cod end no greater than 1mm;  
 iv) rest of the net designed such that glass eels do not become trapped or abraded;  
 v) vivier tank on board and in use; AND fishermen can demonstrate that the mortality rate of the catch over the duration of holding in the storage facility is ≤8% for each batch captured. |
| **red score indicator** | The fishing technique does not meet the amber requirements, AND/OR mortality rate in the storage facility exceeded 8% for one or more batches in the last 12 months. |

**Discussion**

All fishing on the River Severn Basin glass eel fishery is completed by hand nets.
Fishermen use a unique system to provide elvers to the buyer in the form of trays which contain a maximum of 1kg of Elvers each. The best of these are wooden trays which allow the eels to remain “dry” and protected from the elements.

As the fishery is a passive fishery, mortality rates are low with fishermen reporting mortality rates lower than 1% from the point of capture to the point of sale at the end of the night or after storage before sale. Figures from UK Glass Eels indicate that mortality figures are slightly higher but not significantly. Figures obtained from Glass Eel UK should be considered more accurate as they are based on measured and recorded figures rather than simply visual observation, and are over a period which exceeds 24 hours. Mortality for the years 2015-2017 were presented as 1.13, 2.4, 1.58 respectively. At the time of assessment figures were not yet available for the 2018 season as this was slow to start and few elvers were currently being held at the facility.

On average mortality from the Severn and Wye rivers across the three years was seen to be 1.6%, significantly below the 4% requirement for the point of capture.

**Score**  A Green score is provided

### 4. The fishery has negligible impacts on by catch species (See Note 8)

**Weighting:** 1

<table>
<thead>
<tr>
<th>green score indicator</th>
<th>The fishery has a negligible impact on by-catch AND by-catch is returned to the water alive as gently and rapidly as possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td>amber score indicator</td>
<td>The fishery has low-level impacts on by-catch AND by-catch is returned to the water alive as gently and rapidly as possible.</td>
</tr>
<tr>
<td>red score indicator</td>
<td>The fishery has a severe impact on by-catch AND/OR by-catch is discarded dead</td>
</tr>
</tbody>
</table>

**Discussion**  By catch in the fishery is considered to be very low - negligible with only the occasional salmonid, shrimp or fish fry being caught within the hand nets. This is mainly due to the fish being required to swim against the current of the river to get into the nets. Generally all by-catch is returned to the river directly, live and in good condition. UK Glass Eels also operate a holding tank for any by-catch that reaches the facility alive to be held in (to then be returned to the river).

No specific quantitative assessment of by-catch has been completed but it is clear that the impacts are negligible.

**Score**  A Green score is provided

### 5. The fishery has negligible impacts on rare or other protected species

**Weighting:** 1

<table>
<thead>
<tr>
<th>green score indicator</th>
<th>The fishery has no direct interactions resulting in mortality or injuries with other species that are considered vulnerable, threatened, endangered or are protected under national or international law.</th>
</tr>
</thead>
<tbody>
<tr>
<td>amber score indicator</td>
<td>Interactions, resulting in mortality or injury, with other species that are considered vulnerable, threatened, endangered, or are protected under national or international law, are rare and have no overall measurable impact on the population.</td>
</tr>
<tr>
<td>red score indicator</td>
<td>The fishery has interactions resulting in mortality or injuries, with species that are considered vulnerable, threatened, endangered or are protected under national or international law, which may have an impact at the population level.</td>
</tr>
</tbody>
</table>

**Discussion**  The River Severn Basin glass eel fishery can be seen to have no direct interactions with other species that are considered vulnerable, threatened, or endangered, or are protected under national or international law. Significant interactions have not been observed with species that are protected or threatened at a national or international level.
resulting in injury or mortality with other species.

### 6. The fishery has negligible impacts on habitats

**Weighting:** 1

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>green score indicator</strong></td>
<td>The fishing gear does not cause any damage to the bottom.</td>
</tr>
<tr>
<td><strong>amber score indicator</strong></td>
<td>Damage to the bottom by gear is limited or minimal.</td>
</tr>
<tr>
<td><strong>red score indicator</strong></td>
<td>Damage to the bottom by gear is frequent or widespread.</td>
</tr>
</tbody>
</table>

#### Discussion

The hand-held nets are only gently placed on the bottom or held in the above the bottom and therefore the level of damage possible is extremely low. It is not in the interest of the fishermen to have heavier contact with the bottom as this will cause siltation of the nets and may result in damage to the nets.

### Score

A Green score is provided

---

#### 3. Component 7 - Traceability

This section is valid for any client taking ownership of SEG certified product and who wishes to sell it as such.

1. **Incoming Product** *(See Note 20)*

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>green score indicator</strong></td>
<td>The organisation/fishery operates a system which allows incoming eel products to be traced back to a certified source.</td>
</tr>
<tr>
<td><strong>red score indicator</strong></td>
<td>The organisation/fishery is unable to demonstrate that product can be traced back to a certified source.</td>
</tr>
</tbody>
</table>

   **Discussion**

   All fishermen are required to be licenced for a certain area and this licence number is provided to the buyer. All licence numbers now remain the same between years, except when new entrants to the fishery commence. As all eels are attributed at the point of first sale to an individual licence there is a good tracing system in place for all eels.

   **Score**

   A Green score is provided

2. **Separation and Segregation of Product** *(See Note 21)*

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>green score indicator</strong></td>
<td>The organisation operates a system which ensures that the product remains separated at all stages from arrival to dispatch from non-certified eel products AND the organisation ensures that any products wishing to make a claim as certified do not contain any non-certified eel-based ingredients.</td>
</tr>
<tr>
<td><strong>red score indicator</strong></td>
<td>The organisation has no system in place to ensure that certified and non-certified product remains separate at all stages OR non-certified and certified products have become mixed OR certified products (or products wishing to be certified) contain or could contain non-certified eel-based ingredients</td>
</tr>
</tbody>
</table>

   **Discussion**

   All elvers caught are covered by this assessment. No separation is therefore required at the fishery level.

   **Score**

   A Green score is provided

3. **Outgoing Product** *(See Note 22)*

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>green score</strong></td>
<td>The organisation only labels certified products with the ‘SES’ ecolabel once</td>
</tr>
</tbody>
</table>

---
it has been approved to do so through the signing of an ‘SES’ ecolabel licence agreement.

All product to be sold as certified by an organisation meets the following criteria:

- Any product labelling shall be accompanied by the ‘SES’ logo.
- Products shall be accompanied by an invoice which:
  - Includes the prefix ‘SES’ in the product description;
  - Includes a record of the volume/quantity of product and to whom it was sold;
  - Includes the certificate code on the invoice
- The certificate code must be clearly related to the certified product only

The above requirements are met except that:

- Products have not been correctly labelled through the invoice

Products or product invoices have been labelled as SES with the words SES or the SES Eco label despite not being completely derived from a certified source.

The system employed on the River Severn glass eel fishery does not include any invoicing. Product is directly delivered to the vivier, weighed and a ticket provided for the quantity sold, licence number and date of sale. Since the fisherman fish in only assessed areas and do not catch any non-certified product a green score is awarded here.

A Green score is provided

4. – Record keeping and documentation (See Note 23)

- The organisation operates a system that allows the tracking and tracing of all eel from purchase to sale and including any steps in between. In the case of live eels this should include the ability to track each eel in each batch delivered to a buyer to be connected back to a water, a time period (maximum duration one month) and specific fisherman/vessel.
  - The organisation operates a system that also allows for the completion of a batch reconciliation of eel product by weight over a given period.
  - The organisation maintains records for a minimum of three (3) years.

The above requirements are met except that records have been maintained for less than three (3) years

The organisation’s tracking and tracing system shows evidence that certified and non-certified product have become mixed AND/OR batch reconciliation
<table>
<thead>
<tr>
<th>Records are unable to confirm that outgoing quantities are in line with incoming quantities.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discussion</strong></td>
</tr>
<tr>
<td><strong>Score</strong></td>
</tr>
</tbody>
</table>