

# **Delivering Scotland's River Basin Management Plans**

**Next steps in implementing an integrated approach to the protection of shellfish growing waters**

**Final Business and Regulatory Impact Assessment**



**November 2013**

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# PROTECTION OF SHELLFISH GROWING WATERS – NEXT STEPS

## 1.0 TITLE

Delivering Scotland's River Basin Management Plans: Next steps in implementing an integrated approach to the protection of shellfish growing waters. A Final Business and Regulatory Impact Assessment (BRIA).

## 2.0 PURPOSE AND INTENDED EFFECT

### 2.1 Objectives

- To ensure the continued protection of shellfish waters and the sustainability of the shellfish industry following the repeal of the Shellfish Water Directive (2006/113/EC)(SWD) in 2013
- To improve the links between the protection of shellfish waters and the requirements of the EU food hygiene regulations

### 2.2 Background

The Scottish Government (SG) manages Scotland's seas for prosperity and environmental sustainability, recognising the need for clean healthy water in shellfish production areas to ensure good quality produce safe for human consumption. This contributes to the SG's overall purpose of sustainable economic growth and achievement of a shared vision of clean, healthy, safe, productive, biologically diverse marine and coastal environments, managed to meet the long term needs of people and nature.

Shellfish waters are currently regulated by European Directives and Regulations -

Shellfish Waters Directive (2006/113/EC) which is transposed into Scots law by the Surface Waters (Shellfish) (Classification) (Scotland) Regulations 1997 seeks to:

- Protect shellfish waters in order to support shellfish life and growth and thus contribute to the high quality of edible shellfish products
- Protect shellfish waters against pollution and, where necessary, establish programmes in order to reduce pollution.

EU food hygiene regulations (853/2004 and 854/2004) seek to:

- Specify the health conditions for the production and placing on the market of shellfish and establish the location and boundaries of shellfish harvesting areas. On the basis of the bacteriological criteria, using the faecal coliform indicating bacteria, *Escherichia coli* (*E.coli*), harvesting areas are classified according to the degree of potential contamination in samples of shellfish. Areas Sites are classified from A to C depending on the level of *E.coli* present.

Product from a Class A area may be placed directly on the market. Class B product must be subject to depuration (purification), relaying or cooking and Class C product must be relayed before it can be placed on the market.

The Water Framework Directive (2000/60/EC) (WFD) was introduced to protect and improve Europe's water environment. This has been transposed by the Water Environment and Water Services (Scotland) Act 2003 (WEWS), and taken forward through the introduction of River Basin Management Plans (RBMPs) which put in place an integrated framework to help deliver Ministers' aims for Scotland's water environment.

The SWD will be repealed in December 2013 and this offers an opportunity to integrate the aims of the SWD within the wider WFD implementation framework in order to offer continuing protection to the shellfish industry.

The Aquaculture and Fisheries (Scotland) Act 2013 (A&F Act) introduces provisions for the continued protection of water quality from the effects of pollution in designated shellfish waters around Scotland. Draft regulations made under the Act specify the requirements for monitoring and improving water quality in those designated shellfish waters.

### **2.3 Rationale for Government Intervention**

- To ensure the sustainability of the shellfish industry after the SWD is repealed in December 2013
- To prevent deterioration of water quality in existing shellfish designated waters
- To ensure a good quality product which is safe for human consumption

Good water quality is essential for the production of shellfish. Water bodies can be impacted by pollution from various sources such as run-off from agricultural land or discharges from sewage treatment works. The SWD currently offers protection to designated shellfish areas by ensuring action plans to meet relevant environmental standards are put in place. However as noted above the SWD is being repealed in December 2013.

Under the RBMP process, all protected areas, including shellfish growing waters, are required to meet environmental standards specific to their designated purpose in addition to good ecological status. For example, at present, the SWD sets water quality standards for shellfish waters, across a range of chemical parameters. Many of these parameters also have associated standards which apply to all water bodies under the WFD framework.

A key consideration is the standard for faecal indicator organisms (FIOs) under the SWD. Currently there is no standard for FIOs within WFD and we are supporting shellfish water designations by incorporating a FIO standard where appropriate through the WEWS framework, as amended by the A&F Act provisions.

### **3.0 CONSULTATION**

We engaged with relevant bodies to help develop the options.

#### **3.1 Within Government**

Food Standards Agency (Scotland) (FSAS) – in aiming to integrate the relevant directives, designated sites, and regulatory standards.

Scottish Environment Protection Agency (SEPA) – as part of regular and on-going discussions relating to all aspects of the protection and enhancement of Scotland's water environment.

#### **3.2 Public Consultation**

Our public consultation entitled “Delivering Scotland’s River Basin Management Plans: Next steps in implementing an integrated approach to the protection of shellfish waters” ran from 8 July 2013 to 27 September 2013. The consultation was made available on the Scottish Government website and sent to sector organisations for onward distribution to members. We received 9 responses to the consultation.

#### **3.3 Business**

Scottish Water - in recognition of the possible implications for their assets and investment programme.

Industry – representatives of the Association of Scottish Shellfish Growers (including delegates at the Association’s 2011, 2012 and 2013 conferences) and Seafood Shetland have been fully involved throughout the development process. All are fully supportive of the proposals and the recommended option.

An implementation strategy has been developed, led by a working group comprising key players from industry and relevant agencies.

### **4.0 OPTIONS**

#### **4.1 Option summary**

- Option 1 - Do nothing. Allow the SWD to fall and offer no equivalent level of protection to Scotland’s shellfish waters.
- Option 2 - Designate new sites; assign an environmental objective; shellfish waters meet the standards equivalent to Class A under the food hygiene rules, incorporating the WFD disproportionate cost test.
- Option 3 - Designate new sites; assign an environmental objective; shellfish waters meet the standards equivalent to Class A under the food hygiene rules.

## 4.2 Sectors and groups affected

- Shellfish industry
- 'Dischargers' to the water environment - agriculture, industries and households.
- FSAS - responsible for monitoring and classifying shellfish harvesting areas.
- SEPA - water quality monitoring, sampling and investigation of pollution issues.

## 4.3 Options

### 4.3.1 Option 1 - Do nothing

Under this option the current designations with their associated objectives would fall in December 2013 with the repeal of the SWD. FIO standards would not be considered under the WFD and there would be no legal obligation for those discharging to the water environment to comply with such standards in order to protect and enhance Scotland's water environment. This would result in deterioration water quality which in turn would not support a sustainable future for the industry. It would also make any previous investment to protect the shellfish water environment somewhat obsolete. As a result this is not an option acceptable to Scottish Ministers.

### 4.3.2 Option 2 - Designate new sites, assign an environmental objective and associated standards with the aim of ensuring all shellfish waters meet the standards equivalent to Class A under the EU food hygiene rules, incorporating the WFD disproportionate cost test

Under this option, new shellfish protection areas would be designated and each would be assigned an environmental objective reflecting the environmental standards required to meet Class A of the current EU food hygiene regulations. This would become the focus of any environmental improvement programmes and help align the requirements of the RBMP with the EU food hygiene regulations and sets standards to offer the same level of protection to new designated sites.

This option would continue to offer the same minimum level of protection of the SWD but provide flexibility to take into account local circumstances when determining the environmental standard for the water body. This option would balance the benefits of environmental improvements against additional costs to others and therefore take account of disproportionate cost analysis. It also follows the WFD model that permits a phased approach to achieving environmental improvements by allowing for a lower classification to be permitted in the first instance (Class B) with a view to achieving a higher level (Class A) over a longer period and therefore ensure full integration between the WFD and EU food hygiene regulations.

**The Scottish Government recommends this option, and the vast majority of the responses supported this recommendation.**

### 4.3.3 Option 3 - Designate new sites, assign an environmental objective and associated standards with the aim of ensuring all shellfish waters meet the standards equivalent to Class A under the EU food hygiene rules

Under this option each designated shellfish area would be assigned an environmental objective reflecting the environmental standards required to meet Class A of the current EU food hygiene regulations. This would become the focus of any environmental improvement programmes and help align the requirements of the RBMP with the EU food hygiene regulation.

This would provide for the highest level of protection to Scotland’s shellfish waters and shellfish quality. It would provide a uniform standard and absolute clarity of the environmental standards required of anyone wishing to use the waters for shellfish production. No disproportionate cost analysis be applied. Therefore any operator discharging to the designated water environment would have to ensure the environmental standards, and particularly the FIO standard, relating to Class A standards are met, irrespective of cost implications.

#### 4.4 Costs

Each shellfish designated water, harvesting site, and shellfish business has its own unique characteristics and local factors that determine any cost and benefits associated with operating within the designated area. As a result the following costs and benefits are general, based on averages from Industry totals.

##### 4.4.1 Shellfish production

- There are currently 80 designated shellfish protected waters
- There are 154 classified shellfish harvesting areas, of which 98 are within the designated shellfish protected waters
- There are approximately 153 authorised businesses supporting 171 full-time, 187 part-time and casual workers as of 2012
- Total industry value at first sale of approximately £8.7 million<sup>1</sup> in 2012 of which –

Mussel: £7.5 million	Pacific oyster: £0.95 million
Native oyster: £0.19 million	Scallop: £0.10 million
Queen: £0.001 million	

Based on the figures above, the following can be extrapolated to provide base general mean figures:

- Average (mean) shellfish harvesting area turnover - £56k
- Average (mean) business first sale turnover - £57k
- Estimated total shellfish designated protected area turnover - £5.6m
- Assumed average turnover per shellfish designated protected area - £70k

A suitable measure of the benefit to society of shellfish production is profits. The BRIA for the recent A&F Act suggested that, for shellfish farming, profits were in the order of 30 per cent of gross revenues, an average of £21k for each shellfish

<sup>1</sup> Scottish Shellfish Farm Annual Production Survey 2012 @ <http://www.scotland.gov.uk/Publications/2013/05/6277>

designated protected area. In this analysis we assume that for each designated site the associated benefits of designation are the full profits from the site.

#### 4.4.2 Scottish Water

Under SW’s Quality and Standards (Q&S) investment programme SW has spent approximately £63 million in relation to SWD drivers since 2002<sup>2</sup> –

- Q&S II (2002-2006) £38.5 million over 22 shellfish designated waters
- Q&S IIIA (2005-2010) £8.6 million over 9 shellfish designated waters
- Q&S IIIB (2010-2015) projected spend of £16 million over 3 shellfish designated waters

Based on SW investment costs against the total number of shellfish designated waters it can be surmised that the average (mean) investment for SW in a designated shellfish protected area is in the region of £787k per area (£63 million across 80 designated protected areas).

Taken this further, and as a general rule only SW investment could be surmised as –

- Low SW investment = £394k (50% of mean cost)
- Medium SW investment = £787k (mean cost)
- High SW investment = >£1 million
- SW estimate that the operational costs of running plants to meet shellfish drivers can typically cost some £10,000 per annum.

#### 4.4.3 Key comparisons

<b>Current position – 80 designated protected areas (DPA)</b>		
Production £5.6m Profits £1.7m	Production £5.6m Profits £1.7m	Production £5.6m Profits £1.7m
Low SW investment £32m, plus £10k pa running costs	Med SW investment £63m, plus £10k pa running costs	High SW investment >£80m, plus £10k pa running costs
Average DPA cost neutral in 35 years	Average DPA cost neutral in 71 years	Average DPA cost neutral in 90+ years

We do not know at this stage how many sites will be brought forward for designation. Looking at the cost data above it is clear that SW costs can be considerable in relation to the benefits in terms of shellfish production first sale prices and associated profits.

<sup>2</sup> Data supplied by Scottish Water



#### **4.4.4 Food Standards Agency Scotland (FSAS)**

- Sampling and analysis (of shellfish harvesting areas) cost is approximately £2.1m per year<sup>3</sup> - average mean of £14k per harvesting area

#### **4.4.5 Scottish Environment Protection Agency**

- Monitoring and analysis of shellfish protected areas cost is approximately £130k per year<sup>4</sup>. This is comparatively low as the bulk of the analysis is carried out by FSAS (see above).

#### **4.5 Benefits**

- Long term sustainability of the shellfish industry that produces good quality produce in a protected environment
- On-going protection to Scotland's water environment, offering different levels of proportionate environmental protection in line with RBMP principles
- Support investment decisions that offer best value for money through the introduction of a disproportionate cost analysis to ensure all users of the water environment are adequately considered when determining possible shellfish designations

### **5.0 SCOTTISH FIRMS IMPACT TEST**

#### **5.1 Findings**

The proposals contained within this BRIA are designed to ensure the on-going sustainability and growth of the Scottish shellfish industry whilst protecting Scotland's waters. The recommended option is likely to further Scotland's reputation of producing good clean healthy produce from our water environment. The costs and benefits of these proposals on individual businesses will be similar to those currently offered by the SWD which are determined by local factors.

In summary, the recommended option will roll forward existing policy whilst ensuring it is more relevant to food hygiene considerations and more cost-effective for key parties. We have discussed these proposals with business representatives from the two main business interests affected by this policy – the shellfish sector and Scottish Water.

In face-to-face discussions with representatives of the shellfish sector it is clear there is strong support for the recommended options. For many current shellfish producers the main benefits will arise from ensuring there is no deterioration in current good water quality, thus ensuring there are no increased costs. There will be market benefits for those operators who produce at sites where water quality is currently less good and where improvement measures allow growing waters to be upgraded to Class A. However it is recognised that potentially the most significant benefits will

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<sup>3</sup> Figures from FSAS

<sup>4</sup> Figures from SEPA

be for new producers entering this market, by providing pre-determined suitable areas of good water quality in which to site their operations.

In face-to-face discussions with Scottish Water, the industry welcomed these proposals. Significant levels of investment have been made by Scottish Water to help bring water quality up to appropriate levels. The proposed disproportionate cost test will ensure that future levels of investment are proportionate to the benefits achieved.

## **5.2 Competition Assessment**

In considering the impact that this policy may have on competition between firms we have carried out a competition assessment filter using the following questions:

- 1) Will the proposal directly limit the number or range of suppliers? e.g. will it award exclusive rights to a supplier or create closed procurement or licensing programmes?
- 2) Will the proposal indirectly limit the number or range of suppliers? e.g. will it raise costs to smaller entrants relative to larger existing suppliers?
- 3) Will the proposal limit the ability of suppliers to compete? e.g. will it reduce the channels suppliers can use or geographic area they can operate in?
- 4) Will the proposal reduce suppliers' incentives to compete vigorously? e.g. will it encourage or enable the exchange of information on prices, costs, sales or outputs between suppliers?

The answer to questions 1, 2 and 4 is no.

However for question 3 it is possible that the policy may have some small effect on the ability of some producers to compete. Option 2 could potentially constrain the geographic area shellfish growers could operate in by supporting production only in sites capable of attaining Class A without disproportionate investment and therefore limiting the potential location of production. However it is recognised that the water quality around Scotland is generally of sufficiently good quality that growers could operate efficiently in the vast majority of sites, and where necessary could undertake depuration.

## **6.0 LEGAL AID IMPACT TEST**

It is not envisaged that there will be any greater demands placed on the legal system by this proposal. Accordingly, it is not considered that there will be any effect on individuals' right of access to justice through availability of legal aid or possible expenditure from the legal aid fund. The Scottish Government's Access to Justice Team have considered this document and are in agreement with this view.

## **7.0 ENFORCEMENT, SANCTIONS AND MONITORING**

### **7.1 Enforcement and sanctions**

In order to take forward this range of proposals we have introduced new legal powers. The Aquaculture and Fisheries (Scotland) Act 2013 provided a power for Ministers to identify areas for the purpose of the protection of economically significant shellfish. This should enable Ministers to designate and de-designate areas as appropriate.

Ministers propose to introduce draft regulations to enable the setting of environmental objectives and apply relevant environmental standards in designated waters. The draft regulations introduce the following provisions:

- the core objectives that would apply in those waters – to achieve the environmental standards equivalent to Class A under the food hygiene rules;
- the possibility of setting lower objectives where relevant, taking account of the normal WFD considerations of technical feasibility and disproportionate costs;
- the introduction of improvement measures to enable the achievement of the objectives;
- a duty on SEPA to secure such monitoring as necessary to assess the condition of shellfish waters and the effectiveness of any measures taken for their protection or improvement.

### **7.2 Monitoring**

Routine monitoring will be carried out at individual shellfish water protected areas on a continuous basis to verify the achievement of the objectives set as outlined above. Analysis of these results will determine whether there is a need to take further improvement action.

## **8.0 IMPLEMENTATION AND DELIVERY PLAN**

We wish to ensure our proposals for the designation of shellfish waters under the WFD becomes an integral part of the RBMP<sup>5</sup>. Any environmental standards adopted will be incorporated within the existing Ministerial Standards and Classification Directions that cover all of Scotland environmental water objectives. These standards will come into force with the repeal of the SWD in December 2013.

Under the WFD, RBMPs are prepared and updated every six years. In order to test the effectiveness of the implementation plan, a post-implementation review of the policy as a whole will be carried out within 6 years of implementation, as part of each RBMP review.

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<sup>5</sup> [www.scotland.gov.uk/Topics/Environment/Water/15561/WFD/DRBMPs](http://www.scotland.gov.uk/Topics/Environment/Water/15561/WFD/DRBMPs)

## 9.0 SUMMARY AND RECOMMENDATION

### 9.1 Recommended option

**Option 2 is recommended and the vast majority of the responses supported this recommendation.**

It is clear that in order to help Ministers and the shellfish industry's aims for increasing productivity, we must have a robust mechanism in place for driving any necessary improvements which remain flexible enough to ensure the on-going sustainability of the industry. Option 2 provides for the same level of protection as currently provided by the SWD; provides the sufficient level of flexibility required; and crucially introduces disproportionate cost considerations to the process. Collectively this option will ensure the on-going protection and enhancement of Scotland's water environment without disproportionate burdens on other sectors.

### 9.2 Summary of costs and benefits

Shellfish turnover (designated sites)<sup>6</sup> vrs SW investment<sup>7</sup>

<b>Option 2 - Costs and benefits per new site including disproportionate cost test<sup>8</sup></b>		
Increased annual production £70k; Profits £21k		
Implied max cost of SW £65k plus £10k pa running costs		
Average DPA cost neutral in 5 years		
<b>Option 3 - Costs and benefits per new site without disproportionate cost test</b>		
Increased annual production £70k; Profits £21k	Increased annual production £70k; Profits £21k	Increased annual production £70k; Profits £21k
Low SW investment £394k plus £10k pa running costs	Med SW investment £787k plus £10k pa running costs	High SW investment >£1m plus £10k pa running costs
Average DPA cost neutral in 35 years	Average DPA cost neutral in 71 years	Average DPA cost neutral in 90+ years

The shellfish farming industry has a target to increase shellfish production, especially mussels, from 6525 tonnes in 2012 to 13,000 tonnes by 2020. In order to support this level of growth without placing unreasonable cost burdens on SW and its customers, applying a disproportionate cost test will ensure that costs are only incurred when they are in line with the expected benefits.

<sup>6</sup> Based on estimated production value per designated site as outlined in section 4.4.1

<sup>7</sup> Based on estimated 'low, medium' and 'high' SW investment as outlined in section 4.4.2

<sup>8</sup> Provisional example only, based on 5 years to achieve cost neutral

I have read the impact assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs. I am satisfied that business impact has been assessed with the support of businesses in Scotland.

**Signed:**

**Date: November 2013**

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