

Regulatory Impact Assessment – Additional Shellfish Water Designations 2002

Purpose and intended effect of the measure

Purpose

75 additional waters have been designated in Scotland under the terms of the Surface Waters (Shellfish) (Classification) (Scotland) Regulations 1997 which transpose the EC Directive on the quality required of shellfish waters (79/923/EEC). The waters have been designated by means of a Direction to the Scottish Environment Protection Agency (SEPA). A copy is attached at Annex A. Designation will protect the environment from the adverse effects of pollution and contribute to the high quality of edible shellfish products.

SEPA will monitor these waters, take action to ensure that they meet the mandatory standards of the Directive, and endeavour to ensure that the waters meet the guideline standards of the Directive.

Risk Assessment

Shellfish concentrate pathogens in their flesh from the waters that surround them. Sources of such pathogens include sewage and industrial effluent. This poses a potentially even fatal risk to the health of people who consume shellfish (the harm), particularly if they are only lightly cooked or not cooked at all before consumption (the hazard). The Shellfish Hygiene Directive (91/492/EEC) sets microbiological and other standards to be met by shellfish flesh before they may be placed on the market. It also requires that, where microbiological contamination exceeds specified levels, the shellfish are allowed to filter themselves in precisely controlled conditions before they are sold commercially. Hence the hygiene legislation provides a framework for the production of safe food.

However, the growth of the shellfish themselves can be adversely affected by pollution. Even if the shellfish population is healthy, purifying them to meet food safety standards creates an additional cost for the producer to remedy the deleterious effects of pollution caused by others. Moreover, retailers are increasingly reluctant to take shellfish from poorer quality waters even if they have been purified. The most sustainable way to protect the shellfish, maintain the industry's reputation in the marketplace, reduce the costs to the industry of purification, and ultimately, protect the consumer, is to minimise the levels of pollutants in the water in the first place through appropriate action to protect or improve the quality of the water.

Options

The options are either to designate the waters or not.

Issues of Equity and Fairness

The compliance costs of designation to certain parties (notably the Water Authorities) may, in some circumstances, outweigh the direct economic benefits to the shellfish industry and the local economy of areas where the industry may have a wider positive influence. However,

these costs are unavoidable, given that designation is a requirement of adopted EC legislation. Failure to make such designations has led to the UK being cited to the European Court of Justice. There will, in any event, be wider benefits for the environment arising from these designations.

Benefits

The main benefit of these designations is the protection of public health as it is likely that they will minimise the risks to the health of those who consume shellfish. The designations will also enhance the industry's reputation in the marketplace, enabling it to meet retailers requirements for shellfish that have been produced in clean waters, and there may also be benefits associated with a reduction in the costs associated with purifying shellfish before marketing. Those who benefit will be the shellfish farming industry, those who rely on the industry's products (fish marketers and restaurateurs etc.) and members of the public who eat commercially farmed shellfish from these areas.

There will also be wider environmental benefits from the cleaner seawater at these sites. Protection of these waters to the standards set in the directive will protect wild shellfish populations and other flora and fauna that depend on a good quality aquatic environment. It will also assist in the establishment and maintenance of good ecological quality waters, which is a requirement of the Water Framework Directive (2000/60/EC).

Quantify and value of the benefits

The shellfish farming industry in Scotland had a turnover of some £3m in 2000, employing some 363 people (138 full time and 225 part time), mainly in remoter areas with fewer alternative job prospects. It thus contributes to the sustainability of fragile rural economies. The indications are that the industry is becoming increasingly well established and that production will expand over the next few years.

Shellfish farms may be able to save the costs of purification where the quality of the waters permits shellfish to be sold without purification. However large retailers are tending to insist that shellfish are both purified and sourced from waters that are known to be clean. In that context, benefit to the industry from designation accrues from being able to sell their product successfully in the market place.

Compliance Costs for Business, Charity, and Voluntary organisations

Business sectors affected

The most significant proportion of the compliance costs will fall to the Water Authorities where they discharge waste water to the designated waters and to business or individuals with private septic tanks, where the effluent from the tank affects the quality of the water. The Water Authorities may have to treat waste water to higher standards to fulfil consent conditions set by SEPA in the light of the designation. Soakaways or other remediation measures may have to be added to septic tank systems. In addition, in some cases, pollution from other sources such as run off from land or from vessels and moorings may be found to be compromising the quality of the water and this will have to be investigated and controlled where necessary.

If businesses in the catchments draining to the proposed areas make point source or diffuse discharges which are identified by SEPA's improvement programmes as requiring work to enable the Directive's standards to be reached, they will have to bear the costs of such work. There is no present indication of whether such cases exist.

Total compliance costs

It is not possible to assess the total compliance costs accurately until SEPA start to monitor the waters and can evaluate what actions need to be taken to maintain and improve the quality of the waters to the required standards.

NOSWA estimate that, in the worst case, their expenditure on compliance costs will total up to £13.503m, of which part, however, is likely to be attributable to other statutory drivers, particularly the Urban Waste Water Treatment (Scotland) Regulations 1994, implementing the Urban Waste Water Treatment Directive (91/271/EEC). Any monies actually spent will largely be invested in improvements to septic tanks and sewage treatment works. WOSWA have stated that, as they have a large amount of infrastructure in the areas named, they anticipate spending a considerable amount on compliance costs, but cannot provide an accurate estimate at this point. All of the future Scottish Waters costs will be spread across their entire customer base of water charge payers, in common with the costs for all necessary investment under the present Quality and Standards II and the Quality and Standards III programme.

Compliance costs for a typical business

Again, it is not possible to estimate the costs involved for a typical business or for small businesses that would be affected by the designations until SEPA have monitored the water quality at the site and determined what protection measures are necessary in each case. Water Authority costs will be a factor in determining water charges.

Other Costs

The most significant other costs are those that will fall to government via SEPA for monitoring the quality of the designated waters. SEPA have provided estimates for an annual programme based on current costs. Assuming only one sampling site per water, monitoring the additional designations would take 4.3 full-time staff. Chemical analysis, travel and subsistence, equipment, and microbiological analysis (carried out by FRS Aberdeen Laboratories), would cost an estimated £71,920. There will also be costs involved for SEPA in the preparation of improvement programmes. The improvement programmes for the 11 waters designated in February 2000 came to slightly over £5000. SEPA has agreed with the Executive that they will produce further improvement programmes by the end of 2002, but it will only be in the course of preparing these programmes that the extent of the financial expenditure will be known. These costs will be borne in mind when setting SEPA's future grant-in-aid.

Results of Consultations

A number of bodies representing land users and users of coastal waters were consulted about these designations from July to September 2001. Late comments were also accepted. Three

respondents, The Royal Environmental Health Institute of Scotland, MLURI, and the Scottish Consumer Council stated that they had no comment to make at this time.

The UK Offshore Operators Association Limited and Scottish Natural Heritage replied stating that they were in full support of the proposals. The Marine Conservation Society noted the benefits, and requested that additional resources be made available to SEPA for the implementation of the pollution reduction programmes required. The Marine Laboratory Aberdeen identified some sites that have no current shellfish farming, and these were deleted. The RSPB are fully supportive, and made suggestions for additional sites.

The Scottish Landowners Federation gave their full support, and stated that they expected that any diffuse pollution problems will be addressed by the Water Framework Directive. The Solway Firth Partnership welcomed the designations, and stated that it would be in the interests of all the Solway Firth partners to ensure that the entire Solway is managed in an integrated and sustainable manner. They also expressed hope that SEPA ensure that the discharges it licenses into the Scottish Solway Waters will not adversely affect the water quality of the English shellfish waters. Toller Beattie Solicitors noted that the proposed designations do not extend to all shellfish waters within the meaning of the Directive or to include all waters of a similar type to those that have already been designated under the Directive in Scotland. They also commented that the availability to SEPA of works notice procedures would appear to provide at least a partial regulatory solution to the issue of diffuse pollution.

The shellfish industry was consulted through its trade organisation, the Association of Scottish Shellfish Growers, who wished for more designations of entire loch areas. They would also appreciate a SEERAD Direction to SEPA to improve the imposed parameters of discharges. Three representations were received from individual shellfish farmers, Cribba Sound Shellfish, Peter J F Henry and Seacroft Oysters, who were fully supportive of designations covering their farms. Seacroft Oysters also suggested some entire loch designations. The Shetland Shellfish Growers Association fully supports the proposals, and suggested an additional site at Wadbister Voe. The Wester Ross Fisheries Trust suggested further designations of whole sea lochs and the enclosure of several lochs within one designation.

A number of public bodies were also consulted. Comhairle nan Eilean Siar responded with suggestions for further designations, while confirming that the Loch Stockinish site is now a salmon only production site. The Comhairle also suggested a system by which areas with potential but no current production could be designated to offer reassurance to prospective shellfish farmers. Dumfries and Galloway Council are generally supportive, and requested that other parts of the Solway Coast be designated in the future. The Highland Council suggested additional designations and could see no financial disbenefits of the proposed designations to local communities or industries. Orkney Islands Council asked that the site referred to as Cribba Sound be amended to read Bay of Ireland. No response was received from Argyll and Bute Council, or Shetland Islands Council.

SEPA gave information on areas where shellfish production had ceased, and made some suggestions to extensions of identified sites, and designation for the Solway Firth area. The Solway Firth Partnership made suggestions for other sites and asked that the Solway Firth cockle and mussel shell fishery be considered. West of Scotland Water had particular questions in respect of the Fairlie site. North of Scotland Water (NoSWA) expressed

concerns that the water industry would bear the biggest burden of restoring designated sites. They also suggested that due regard be given to the impact of diffuse pollution in rural areas, and that some sites are likely to be impacted by private septic tanks. They also identified several proposed sites where no shellfish growing currently exists. They consider that there needs to be further discussion between SEPA and NoSWA on compliance points. The Scottish Executive will encourage, and if necessary facilitate, these discussions.

Summary and recommendations

Designation is the preferred option because the Directive requires Member States to designate waters where they are in need of protection or improvement to support shellfish life and growth. All of the 75 waters considered here support significant shell fisheries and therefore should, by law, be designated. Designation would permit the European Commission to close proceedings at the European Court of Justice which, if proceeded with, could result in fines being levied on the UK of up to €534,000 (c. £330,000) per day. Failing to designate is likely to be a breach of the Scottish Executive's obligations under s57(2) of the Scotland Act 1998. Designation met with support from the great majority of those responding to the consultation exercise, and can be accommodated by those who will have to bear the majority of the costs, the Water Authorities and SEPA.

It is not possible to assess the costs of designation accurately until SEPA has carried out a monitoring programme and determined the action that need to be taken to protect the waters to the Directives' standards in each case. The Water Authorities may need to improve their own sewage collection and treatment systems at certain of the new designations. Private septic tank arrangements may need to be improved at these and the other sites. Other sources of pollution may need to be tackled. These costs have to be balanced against the wider environmental benefits that will accrue from protecting these waters to the standards required by the Directive and the benefits to the shellfish farming industry in terms of enhanced opportunities to market their product, and, possibly, reduced costs of purification.

Enforcement, Sanctions, Monitoring and Review

SEPA will produce Action Plans for each water and set appropriate conditions on discharges that are likely to affect the waters. Compliance with the terms of a discharge consent is enforceable by SEPA through legal sanctions set out in the Control of Pollution Act 1974.

The Scottish Executive will keep the need for future designations under review, as required by the Directive and any future EC legislation. In addition, the Scottish Executive Environment and Rural Affairs Department are committed to reviewing this RIA within ten years of the date of designation.

Inquiries on this Regulatory Impact Assessment can be made to:

Fiona M. Watt
SEERAD
Environment Protection Unit: Water Team
1-H
Victoria Quay
EDINBURGH
EH6 6QQ

Tel: 0131 244 0215
Fax: 0131 244 0245
E mail fiona.m.watt@scotland.gsi.gov.uk

Annex A

Classified Waters Description

Ardtoe and Loch Ceann Traigh	An area bounded by lines drawn between NM 591 720 (Rubha na h-Acairseid) and NM 628 727 and between NM 630 703 and NM 630 699.
Bay of Ireland	An area inshore of a line drawn between HY 275 090 (Bu Point) and 280 080, between HY 280 080 and HY 280 070 and between HY 280 070 and HY 290 071.
Black Islands, Kyle	An area bounded by lines drawn between NG 758 280 and NG 740 280, between NG 740 280 and NG 740 340 and between NG 740 340 and NG 783 340.
Camas Nathais	An area inshore of a line drawn between NM 863 375 (Rubha Fion-àird) and NM 871 367 (Rubha Garbh-àird).
Colonsay	An area bounded by lines drawn between NR 340 907 and NR 340 897 and between NR 351 814 and NR 354 910 and between NR 360 903 and NR 360 896.
Cuil Bay	An area north of a line drawn NM 962 555 (Rubha Mòr) and NM 968 554 (Rubha Meadhonach).
Deer Sound	An area inshore of line drawn between HU 547 087 and HU 555 080 and extending inshore to MLWS.

Dunstaffnage	An area bounded by lines drawn between NM 874 342 and NM 874 350, between NM 874 350 and NM 880 350 and between NM 880 350 and NM 880 345.
Eddrachillis Bay	An area bounded by lines drawn between NC 099 347 (Cnoc a' Mhoil Bhàn) and NC 113 342 and between NC 098 336 and NC 098 337 and extending to MLWS.
Enard Bay	An area inshore of a line drawn between NC 060 186 and NC 065 180 and extending to MLWS.
Fairlie	An area bounded by lines drawn between NS 208 550 and NS 197 544 and between NS 206 547 and NS 204 544.
Gometra	An area inshore of lines drawn between NM 349 410 and NM 340 410, between NM 340 410 and NM 340 400, and between NM 340 400 and NM 366 396 (Rubha Bhrisdeadh-ramh).
Inganess Bay	An area inside of line drawn between HY 490 123 (Head of Holland) and HY 510 113 (Yinstay Head).
Inner Loch Torridon	An area east of a line drawn between NG 806 566 and NG 811 560 and extending to MLWS.
Inverneill, Loch Fyne	An area inshore of lines drawn between NR 850 801 and NR 870 800 and between NR 870 800 and NR 851 811.
Isle Ornsay	An area bounded by lines drawn between NG 704 140 and NG 720 140 and between NG 720 140 and NG 720 110 and between NG 720 110 and NG 703 110.
Keills, Knapdale	An area bounded by lines drawn between NR 682 791 (Rubha na Cille) and NR 670 820 and between NR 670 820 and NR 694 820.
Kerrera	An area inshore of a line drawn between NM 824 303 and NM 834 306 (Rubh' Ard an Duine) and extending to MLWS.
Kyle of Tongue	An area bounded by lines drawn between NC 598 620 and NC 621 620 and between NC 572 590 and NC 593 590.
Kylerhea	An area bounded by lines drawn between NG 800 238 and NG 807 237 and between NG 790 210 and NG 796 210 .
Lealt, Jura	An area bounded by lines drawn between NR 662 895 (Rubha Camas nam Meanbh-chuileag) and NR 680 900 and Between NR 680 900 and NR 680 931.
Linne Mhuirich	An area inshore of a line drawn between NR 714 824 and NR 719 828.

Lismore	An area south of a line between NM 872 460 and NM 888 460.
Little Loch Broom	An area inshore of a line drawn between NG 984 982 and NG 973 962 (Stattic Point) and extending inshore to MLWS.
Loch Ainort	An area inshore of a line between NG 565 300 and NG 575 290).
Loch Caroy	An area bounded by lines drawn between NG 296 416 (Crossnish Point) and NG 305 416 and between NG 300 430 and NG 305 430 and extending to MLWS.
Loch a'Chumhainn	An area inshore of a line drawn between NM 386 551 (Rubha an Aird) and NM 408 571 (Quinish Point).
Loch Craignish	An area north east of a line drawn between NR 760 989 (Rubh' an Lionaidh) and NR 783 970.
Loch Dunvegan	An area bounded by lines drawn between NG 185 548 and NG 200 550 and between NG 200 550 and NG 198 528.
Loch Dunvegan	An area inside a line drawn between NG 215 490 and NG 235 490 (Uiginish Point).
Loch Eishort	An area east of a line drawn between NG 640 157 and NG 640 151 and extending to MLWS.
Loch Ewe	An area south of a line drawn between NG 817 920 and NG 840 920 and extending inshore to MLWS
Loch Eynort	An area bounded by lines drawn between NF 792 283 and NF 793 280, and between NF 803 272 (Rubha Lailum) and NF 805 274 and extending to MLWS.
Loch Feochan	An area inshore of a line drawn between NM 852 236 and NM 852 234 and extending to MLWS.
Loch Glendhu	An area bounded by lines drawn between NC 240 343 and NC 240 340 and between NC 240 339 and NC 246 339.
Loch Grimshader	An area bounded by lines drawn between NB 414 256 and NB 414 257 and between NB 424 256 and NB 424 259 (Rubha Alltan Pheadair) and extending to MLWS.
Loch Gruinart	An area south of a line drawn between NR 292 730 and NR 304 730.

Loch Harport	An area bounded by lines drawn between NG 332 370 (Bracadale Point) and NG 335 364 (Ardtreck Point) and between NG 344 374 (Rubha na h-Uamha) and NG 352 364 and extending to MLWS.
Loch Hourn	An area inshore of lines drawn between NG 715 044 and NG 715 070 and between NG 715 070 and NG 768 140 (Rubha Mòr).
Loch Inchard	An area inshore of a line drawn between NC 230 552 and NC 233 556 and extending to MLWS.
Loch Leurbost	An area bounded by lines drawn between NB 370 255 and NB 370 251 and between NB 380 247 and NB 380 241 and extending to MLWS.
Loch Leurbost	An area bounded by lines drawn between NB 391 241 and NB 393 243 (Aird Feiltanish) and between NB 394 236 and NB 400 242 and extending to MLWS.
Loch Leven	An area bounded by lines drawn between NN 052 596 and NN 052 598 (Ballachulish Bridge) and between NN 175 618 and NN 175 621 and extending to MLWS.
Loch Melfort	An area inshore of a line drawn between NM 800 132 and NM 800 107.
Loch Moidart, North Channel	An area bounded by lines drawn between NM 634 756 (Rubh' Aird an Fheidh) and NM 641 756 (Rubha nan Clach Dearga) and between NM 662 742 and NM 662 746.
Loch Moidart, South Channel	An area bounded by lines between NM 627 727 (Farquhar's Point) and NM 628 734 and between NM 656 727 and NM 657 717.
Loch Nevis	An area bounded by lines drawn between NM 770 965 and NM 770 934 and between NM 840 952 and NM 840 942.
Loch Roag	An area bounded by lines drawn between NB 096 340 and NB 095 338, between NB 118 344 (Rubh' a'Scarp) and NB 144 345 (Leac na Cudaigean), between NB 180 335 and NB 180 343, and between NB 127 300 and NB 128 300. This replaces the Loch Roag designations in the Surface Waters (Shellfish)(Classification)(Scotland) Direction 1998.
Loch Scridain	An area bounded by lines drawn between NM 406 270 and NM 404 241 (Rubha Dubh) and between NM 520 297 and NM 520 267.
Loch Stornoway, Knapdale	

	An area inshore of a line drawn between NR 731 603 (Rubha na Lugain) and NR 719 608 (Rubha Cruitiridh).
Loch Striven	An area bounded by lines drawn between NS 050 828 and NS 055 828 and NS 079 720 and NS 095 720.
Lynn of Lorn	An area bounded by lines drawn between NM 870 405 and NM 880 405 and between NM 870 405 and NM 870 389.
Mull of Galloway	An area to west of line drawn between NX 153 357 (Cailiness) and NX 160 306 (Lagvag) and extending to MLWS.
Shuna	An area bounded by lines drawn between NM 767 098 (Rubha Salach) and NM 786 093 (Eilean Creagach) and between NM 784 088 (Eilean Creagach) and NM 775 086.
Loch Sligachan	An area bounded by lines drawn between NG 537 351 and NG 550 322 and extending to MLWS.
Loch Sunart	An area bounded by lines drawn between NM 703 636 (Rubha Aird Beithe) and NM 707 629 (Rubha Aird Earnaich) and NM 730 612 and NM 734 626.
Sound of Kerrera	An area bounded by lines drawn between NM 840 290 and NM 832 290 and between NM 811 260 and NM 824 260.
Sound of Shuna	An area bounded by lines between NM 925 500 and NM 935 500 and between NM 919 485 and NM 923 485.
Tobermory	An area to the south-east of a line drawn between NM 516 552 and NM 518 555 (Rubh' an Righ).
Ulva	An area north of a line drawn between NM 401 385 and NM 407 380.
West Loch Tarbert	An area bounded by lines drawn between NR 823 650 and NR 830 647 and between NR 837 670 and NR 844 670 and extending to MLWN.
West Loch Tarbert	An area inshore of a line drawn between NR 790 600 and NR 764 584 and extending to MLWN.
West Loch Tarbert	An area inshore of lines drawn between NR 801 613 and NR 806 620 and between NR 806 620 and NR 814 622.
Sandside Bay	An area inshore of a line drawn between HY 588 064 and HY 594 070 and extending to MLWS.
St Catherine's Bay, Stronsay	

An area inshore of a line drawn from HY 615 295 (Sty Taing) and HY 620 284 (North Taing, Linga Holm) and between HY 621 270 (South Taing) and HY 620 251 (North Taing, Stronsay) and extending inshore to MLWS.

Busta Voe and Linga Voe

An area north of a line drawn between HU 335 632 (Pobies Geo) and HU 368 632 and extending to MLWS.

Cat Firth

An area north of a line drawn between HU 441 530 and HU 445 530.

Colla Firth

An area south of a line drawn between HU 444 700 and HU 451 700 and extending to MLWS.

Gruting Voe

An area north of line drawn between HU 256 474 (Heock Ness) and HU 261 471 extending to MLWS but excluding Olas Voe.

Ronas Voe

An area to east of a line drawn between HU 310 811 and HU 320 806 and extending to MLWS.

Ura Firth

An area inshore of line drawn between HU 292 777 and HU 294 763 (Fissla Taing) and extending to MLWS.

Voe of Clousta

An area bounded by line drawn between HU 305 600 and HU 306 600 and between HU 290 588 (Green Point) and HU 290 582.

Wadbister Voe

An area inshore of a line drawn between HU 442 510 and HU 447 504 and extending to MLWS.

Whale Firth

An area south of a line drawn between HU 464 960 and HU 468 960.

Yell, Basta Voe

An area north of a line drawn between HU 515 975 and HU 518 978 and extending to MLWS.