

Moray Firth SAC Revision Closure Report

Dolphin Management actions	Delete - complete	Delete - ABOM	In Rev 2 as new action	In Rev 2 as O/G action	Corres Rev2 Action
D01.1.1 List and review toxicity to dolphins, and elements of their food chain, of commonly used chemicals and make recommendations as to their use and disposal.	✓				
D01.1.2 Encourage adoption and application of Good Practice Guidelines and ensure that they adequately address the marine issues.	✓				
D01.1.3 Monitor the input from rivers of pollutants including pesticides that discharge into the Moray Firth. And monitor designated shellfish waters for the presence of pesticides.				✓	D01 O/G
D01.1.4 Ensure that water courses which are at risk from "sheep dip" pollution are monitored.				✓	D01 O/G
D01.2.1 Review existing data on nutrient levels and if necessary encourage organisations to gather more data. If problem areas exist, introduce measures to reduce enrichment, through the NVZ initiative.	✓				
D03.1.1 Raise awareness regarding the use and effects of anti-fouling coatings and their potential impact on dolphins and the wider marine environment. Recommend alternative non-toxic methods to potential users. Carry out regular biological monitoring for the effects of TBT.			✓		D01
D03.1.2 Analyse existing and future dolphin tissue samples, and key prey species, for anti-fouling compound contamination.	✓				
D04.1.1 Encourage the aquaculture industry to minimise chemical treatment and medicine use, which are known to impact on dolphins or their prey. Take into consideration the dolphin interest when considering discharge consents.	✓				
D04.2.1 Hold discussions with fish farm operators/employees to raise awareness of current legislation and the impact of feeding discarded fish to dolphins.	✓				
D04.3.1 Review research on the effect of seal scarers on cetaceans and other marine species.	✓				
D04.3.2 Based on the findings of 3.1.1, manage the use of seal scarers in the cSAC and advise on their use. In the future consider regulating their use as a condition of fish farm leases, reviewing and amending existing leases as appropriate. Where possible, encourage the use of alternative methods for deterring seals - e.g. cage tensioning.		✓			
D04.3.3 Consider the deployment of methods of recapture of escaped salmon, encourage best practice among fish farm owners/operators and promote their use.		✓			
D04.3.4 Ensure that relevant authorities approach fish farmers when new mechanisms of control come into place and alert them to potential changes					
D05.1.1 Review the need for monitoring of ballast water discharges.			✓		D02
D05.1.2 Encourage all ships using ports in the cSAC to adhere to IMO Guidelines on ballast water discharge.			✓		D02
D05.1.3 Take ballast water samples to investigate presence of species and contaminants (if required from D5.1.1).			✓		D02
D05.1.4 Investigate the extent of the activity; identify which vessels use ballast water, when and where they discharge and their port of origin.			✓		D02
D06.1.1 For boats which regularly enter the Moray Firth cSAC, encourage the use of engines and propellers which minimise noise in frequencies most likely to disturb marine mammals. In particular encourage the use of large engines with low revving propellers and specify minimum standard noise levels for wildlife watching and research boats.			✓		D03
D06.1.2 Encourage regular maintenance of engines, propellers and boats.			✓		D03
D06.1.3 Raise awareness and make recommendations in relation to the potential impact of noise, boat movements, collisions and marine litter on dolphins, through information provision and the media.			✓		D03
D06.1.4 Develop a working definition of a "quiet boat".			✓		D03
D06.1.5 Set up a working group to coordinate the monitoring of shipping / boat movements and related noise levels in the cSAC and prepare maps showing areas of dolphin activity which would be used to help assess the distribution of impacts and risk.			✓		D04

D06.1.6 Discourage the use of systems with noise characteristics likely to have a potential impact on the dolphins. The assessment of the use of such systems should be undertaken on a case-by case basis			✓		D03
D06.2.1 Review and expand the SNH Dolphin Awareness Initiative and seek experience from other areas where noise control procedures are adopted by boat users. Raise awareness locally and identify examples of schemes elsewhere.			✓		D05
D06.2.2 Encourage close liaison with NC and GP to investigate incidents between recreational craft and dolphins; introduce specific training for marine mammal related issues.			✓		D05
D06.2.3 Establish voluntary registration of all motorised boats within the cSAC.	✓				
D06.2.4 Quantify participants, types, distribution and seasonal patterns of motorised water sport activity in the Firth in order to target awareness raising campaigns.			✓		D04
D06.2.5 Encourage pre-race consultation between race organisers and relevant bodies and raise awareness amongst organisers and participants of the presence of the cSAC and the presence of sensitive marine species.			✓		D05
D06.2.6 Where races take place, encourage race organisers to avoid areas sensitive to marine wildlife or to slow down when approaching sensitive areas.			✓		D05
D06.3.1 Ensure that licensing of research, wildlife-watching and other boats: a) is strongly linked to responsible actions towards marine mammals b) Promotes quiet engine and transmission systems and use of propeller guards c) provides advice on vessel construction d) is reviewed regularly and is open to external scrutiny e) can respond quickly to applications				✓	D02 O/G
D06.3.2 Seek to extend the licensing scheme for dolphin research vessels to include professional film makers and photographers.			✓		D06
D06.3.3 Encourage researchers to publish information collected under the licensing scheme.	✓				
D06.3.4 Consider the environmental carrying capacity for research and wildlife watching vessels in the cSAC and, if appropriate, advise the authorities that no further licences be issued to wildlife watching boats in sensitive areas.			✓		D06
D06.3.5 Review and consolidate the Dolphin Space Programme including: review of the composition, roles and working arrangements of the Dolphin Space Programme steering group, renewal of partners' commitments to the steering group; encouragement of greater operator involvement in the management of the Dolphin Space Programme; identification of incentives and benefits to accredited operators; investigation of appropriate regulatory powers; review and development of the Dolphin Space Programme Guidelines; raising the profile of the land-based infrastructure for dolphin watching; and, assisting continued improvements in the visitor experience provided in the area. Guidelines should be applied to all wildlife-watching boats, including those who do not go "to sea".		✓			
D06.3.6 Encourage the development of research methods which have a minimum impact on the dolphins.		✓			
D06.3.7 Establish an inventory of film, video and slides, to minimise the need for research, film or photography trips.			✓		D06
D06.3.8 Raise awareness in film crews to issues of disturbance, refer all enquiries to land-based sites or accredited members of the Dolphin Space Programme and assist existing Dolphin Space Programme members to support responsible behaviour by film crews.			✓		D06
D06.3.9 Enforce law relative to deliberate harassment of wildlife.		✓			
D08.1.1 Investigate the requirement to develop and implement regional Environmental Quality Standards (EQSs) as appropriate and consult with key stakeholders to consider the effect these will have on the operations of existing facilities and industry.				✓	D04 O/G
D08.1.2 Monitor the impact of sea disposal operations at sites in the cSAC.			✓		D07
D08.1.2 Monitor the impact of sea disposal operations at sites in the cSAC.				✓	D04 O/G
D08.1.3 Investigate the possibility of using non-contaminated dredged material beneficially (e.g. beach nourishment).	✓				
D08.1.4 Review the range of contaminants currently being monitored; consider if it is adequate, particularly in areas known to be important for dolphins.	✓				

D08.2.1 Conduct risk assessments at all sea disposal sites to identify where and when the potential for disturbance and injury is greatest; taking account of the numbers of dolphins sighted, location and time of year.			✓		D07
D08.2.2 Develop a draft dredging and sea disposal management strategy in light of risk assessments (see D08.2.1): a) incorporate specific aspects of the Dolphin Space Programme b) advise applicants and licensees of the dolphin sensitive areas and seasons so that they can plan sea disposal operations in advance whilst taking account of the most sensitive periods c) establish the best method for identifying dolphin presence in the vicinity of dredging and sea disposal sites immediately prior to and during the operations d) explore the possibility and legality of using acoustic scarers to keep dolphins away from an area during disposal operations e) explore the possibility of installing hydrophones in key areas to monitor dolphin presence/absence. f) consult with key stakeholders to consider the effect this will have on the operations of existing facilities and industry. Ongoing		✓			
D08.3.1 Review existing data on the effects of turbidity on dolphin prey species; consider the viability of undertaking collaborative research.		✓			
D09.1.1 Provide, in discussion with fishing interests, information on how fishing activities may impact on dolphins and fishery management and identify, through risk assessment, potentially damaging methods of fishing and seek to have their use controlled within the cSAC.			✓		D08
D09.1.2 Engage actively in the triennial review of the 'Inshore Fishing (Scotland) Act 1984' in light of the dolphin interests.	✓				
D09.1.3 Lobby the EC and the Scottish Executive to ensure that North Sea fish stocks are managed sustainably.	✓				
D09.1.4 Maintain a watching brief on commercial salmon netting activity.	✓				
D09.1.5 Model the energy requirements and total diet of dolphins to better inform understanding of potential interactions/impacts on salmon stocks.	✓				
D09.1.6 Improve management of fish stocks by producing a fishery management plan for each river system which runs into the Moray Firth.	✓				
D09.2.1 Keep a watching brief on the use of mono-filament nets and pair-trawl activity.				✓	D06 O/G
D09.2.2 Maintain a watching brief on legal salmon netting activity (links to 10.1.5).	✓				
D09.2.3 Assess the significance of lost fishing gear in the Moray Firth. If problems exist, identify ways to reduce lost gear and highlight the issue with the industry.		✓			
D09.2.4 Find ways to minimise the potential impacts to dolphins of certain types of fishing gear				✓	D06 O/G
D09.3.1 Develop a campaign to: a) clamp down on illegal salmon netting activity; to include awareness raising of the impacts on dolphins and other wildlife, and to provide additional support to fishery boards to police and control illegal salmon netting activities b) reduce the market for illegally caught salmon			✓		D09
D09.3.2 Hold meeting between key stakeholders around the Moray Firth to develop a coordinated approach with relation to bailiffing for illegal salmon netting.				✓	D06 O/G
D09.3.3 Maintain a watching brief on the effectiveness of the campaign to use zip tags to mark legally caught wild salmon in Ireland. Consider the subsequent development of quality marks with local fishermen, merchants and retailers for legally caught wild Moray Firth salmon.				✓	D06 O/G
D10.1.1 Seek to incorporate environmental responsibilities into the education and training of ship owners and operators, port users, fishermen and recreational boat users.				✓	D07 O/G
D10.1.2 Investigate whether boats are using port waste disposal facilities and ensure that correct disposal facilities are provided.	✓				
D10.1.3 Ensure that those using ports/harbours are aware of waste disposal facilities.	✓				
D10.2.1 Raise public awareness of the environmental effects of fly-tipping and inappropriate litter disposal.				✓	D07 O/G
D10.2.2 Encourage the public to pick up rubbish and lost gear, to participate in beach clean ups and to recycle waste.				✓	D07 O/G

D11.1.1 Record instances when jettison of fuel occurs within the cSAC and review existing guidance to ensure that it is adequately preventing aircraft fuel contaminating coastal waters.				✓	D08 O/G
D11.2.1 Enforce strict code of controls for oil/fuel storage and use. Ensure oil spill response plans are developed and practised. Maintain fuel interceptors on storm water out-falls.		✓			
D11.2.2 Ensure controls on choice of chemicals selected, type of applicators and time and areas of use. Extend the use of environmentally friendly and effective drainage/ treatment systems to all airfields (e.g. reed beds, or run-off treatments as appropriate).	✓				
D11.3.1 Seek experience and information from other areas to determine potential impact and level of risk.		✓			
D11.3.2 Review guidelines in other parts of the world for minimising noise disturbance from helicopters and aircraft, and if they are applicable, adopt similar guidelines in the Moray Firth. Implement training and awareness-raising material for civil and military pilots to avoid hovering over marine mammals.		✓			
D11.3.3 Maintain a watching brief on the use of aircraft and helicopters for observing/filming dolphins and draw up guidelines if necessary.		✓			
D12.1.1 Ensure that port waste disposal strategies are regularly reviewed. Request that harbour authorities consider the cSAC interests in their strategies where appropriate.	✓				
D12.3.1 Raise awareness of the consequences of discharging bilge water and flushing of storage tanks with all vessel operators to stress the importance of compliance.	✓				
D12.4.1 Raise public awareness of the potentially damaging environmental effects of chronic and small scale oil pollution through involvement with the SOCC and Yellow Fish initiative.	✓				
D12.5.1 Promote implementation of SUDS for coastal infrastructure developments		✓			
D12.5.2 Encourage the construction of oil storage facilities.	✓				
D12.5.3 Raise awareness of oil recycling facilities.	✓				
D12.5.4 Endeavour to provide oil recycling facilities.	✓				
D12.5.5 Collate information on sources of chronic oil pollution.	✓				
D13.1.1 Develop Good Practice Guidelines for minimising the production of underwater noise.			✓		D10
D13.1.2 Ensure that the impact of noise production is included in environmental impact assessment.			✓		D10
D13.1.3 Look at all sources of noise from oil and gas activity and identify gaps in knowledge and hence research needs.				✓	D09 O/G
D13.2.1 Consider the use of hydrophones to detect dolphins during seismic surveys				✓	D09 O/G
D13.2.2 Collate information and model the possible effect of seismic activity on the dolphins.				✓	D09 O/G
D13.2.3 Minimise the use of seismic surveys and encourage companies to share/sell data. Elaborate a report specifying the distances to cSAC from where a seismic survey may have an effect on the dolphins and highlighting the mitigation measures required.				✓	D09 O/G
D13.3.1 Review and maintain oil spill contingency plans and ensure that all take account of the dolphins (e.g. that the movements of dolphins are monitored in the event of a major oil spill, and that procedures are in place where oiled dolphins strand ashore).				✓	D10 O/G
D13.3.2 Co-ordinate the scheduling of all oil spill exercises and plans.	✓				
D13.3.3 Heighten awareness of the potential impact of oil spills with regard to the cSAC and the conservation features	✓				
D13.3.4 Ensure that the dolphins are taken into account in the development and implementation of the Port Marine Safety Code.	✓				
D13.3.5 Clarify with the ports and harbours how they will work to add extra scrutiny of passage plans, in the interests of the cSAC.	✓				
D13.3.6 Push ahead the development and implementation of regulations referring to ship to ship transfer of oil.		✓			
D13.3.7 Ensure that the Tal/SNH "Proposed Guidelines for Dealing with Cetaceans in the Event of an Oil Spill in the Moray Firth, Scotland" are implemented.			✓		D11
D13.3.8 Applications for a licence to discharge cuttings and water based muds within the cSAC and adjacent area will receive particular scrutiny in relation to potential impacts on the site's conservation features				✓	D10 O/G

D13.4.1 Draw up awareness raising guidelines for inclusion in pilotage almanacs and for standby boat operators.	✓				
D13.5.1 Clarify regulatory controls in place covering de-fouling and shot-blasting operations; explore development of additional regulatory controls and ensure that any such operations are properly considered in the context of the cSAC.	✓				
D13.5.2 Develop good practice guidelines for de-fouling and shot-blasting operations, including guidelines to minimise the discharge of old paint into the Firth.	✓				
D13.5.3 Agree anchor points in the Moray Firth for carrying out de-fouling and shot-blasting operations.				✓	D10 O/G
D13.5.4 Investigate feasibility of using dry dock facilities to carry out shot blasting and painting where all residues can be disposed of on-shore.	✓				
D13.6.1 Ensure that de-commissioning operations adjacent to or within the cSAC make due consideration of the dolphins/cSAC and that effective mitigation strategies are developed and implemented.				✓	D10 O/G
D14.1.1 Review the known impacts of these contaminants on marine mammals and key elements of their food chain and re-consider the discharge consents for substances where necessary.				✓	D11 O/G
D14.2.1 Encourage the safe disposal of potentially polluting materials through awareness raising initiatives.				✓	D11 O/G
D14.2.2 Consider the monitoring requirements for hormone-disrupting substances and keep a watching brief on Nationally developed initiatives.				✓	D11 O/G
Sandbank Management Actions	Delete - complete	Delete - ABOM	In Rev 2 as new action	In Rev 2 as O/G action	Corres Rev2 Action
S01.3.1 Review existing data on sediment run-off. If significant impacts on the sandbanks are identified then introduce measures to reduce the problem.				✓	S01 O/G
S02.1.1 Following a mapping exercise of the sandbanks to define their extent, location and significance, consult with the harbour and port authorities in relation to anchorages and moorings.			✓		S01
S02.1.2 Consider the designation of areas for anchoring in consultation with harbour and port authorities if areas of high anchor use coincide with areas of high sandbank quality.			✓		S01
S04.1.1 Encourage best husbandry practice to minimise the use of chemical treatments and medicine use.				✓	S02 O/G
S04.2.1 Encourage use of appropriate feeding technology to minimise waste feed.				✓	S02 O/G
S04.2.2 Continue to monitor the seabed in the vicinity of the fish farm.				✓	S02 O/G
S04.3.1 Avoid sensitive areas when leasing fish farm sites				✓	S02 O/G
S04.3.2 Full decommissioning of site to be requirement of lease	✓				
S04.3.3 Ensure any future mussel farms are located in areas able to accommodate them in terms of water depth and movement.				✓	S02 O/G
S04.3.4 Keep a watching brief on the review of the UK policy on non-native species				✓	S03 O/G
S07.1.1 Follow current practice which is to ensure that all proposals are reviewed by the appropriate licensing authorities and that the accepted best practice is taken into consideration before licences and/or consents are issued.				✓	
S07.1.2 Encourage good practice through Pollution Prevention Guidelines (PPGs).				✓	
S07.1.3 New developments that potentially impact upon the site will be subject to appropriate assessment within the existing regulations.		✓			
S08.1.1 Investigate the need to develop and implement regional Environmental Quality Standards (EQSs) as appropriate and consult with key stakeholders to consider the effect these will have on the operations of existing facilities and industry.				✓	
S08.1.2 Monitor the impact of sea disposal operations at sites in the cSAC.			✓		S02
S08.1.3 Investigate the possibility of using non-contaminated dredged material beneficially (e.g. beach nourishment).	✓				
S08.1.4 Review the range of contaminants currently being monitored; consider if it is adequate, particularly in areas known to be important for benthic communities.				✓	S04 O/G

S08.1.5 Develop a draft dredging and sea disposal strategy that takes into account the sensitivity of the areas of operation, and consult with key stakeholders to consider the effect this will have on the operations of existing facilities and industry.		✓			
S08.2.1. Review existing data on the effects of turbidity on benthic species.		✓			
S08.3.1 Provide yearly updates on the scale of sand and gravel extraction in the cSAC.	✓				
S08.3.2 Any commercial extraction that may potentially impact upon the site will be subject to appropriate assessments.	✓				
S09.1.1 Hold annual meeting with fishing industry and SAC Management Group to review and exchange information on fisheries and sandbanks and discuss conservation issues and methods in the cSAC and adjacent areas.			✓		S03
S09.5.1 Refer to published review papers on the effects of Suction/hydraulic dredging on the seabed and associated animal communities.			✓		S03
S09.5.2 Following the review and if necessary, discuss potential management actions with fisheries representatives.			✓		S03
S13.1.1 Effective Regulation of new pipe-laying activity.		✓			
S13.1.2 Consider monitoring of sandbank habitat to assess recovery time.		✓			
S13.1.3 Ensure best practice.		✓			
S13.1.4 Ensure that surveys are considered in areas likely to be involved in the development in order to avoid high biodiversity or spawning areas.		✓			
S13.2.1 Ensure that seismic surveys are carried out at times not sensitive for fish spawning.		✓			
S13.2.2 Maintain a watching brief.		✓			
S13.3.1 Review existing plans to ensure that the sandbank interest is adequately addressed.		✓			
S13.4.1 Ensure proper regulation and consultation of proposed activities.		✓			
S14.1.1 Review the known impacts of these contaminants on sandbanks and re-consider the discharge consents for substances where necessary.		✓			