

Judgment of the Court of Justice of the European Union
in
Case C 418/04 Commission v Ireland
“The Birds Case”

A Programme of measures by Ireland to ensure full
compliance with the Judgment of the Court of Justice
of the European Union

Update – June 2019



**An Roinn Cultúir,
Oidhreachta agus Gaeltachta**
Department of Culture,
Heritage and the Gaeltacht

CONTENTS

Summary

- Background – The Birds Directive
- The case against Ireland – what is it about
- Ireland’s response to the Judgement

Sections

Response to the specific findings against Ireland

- 1. Inadequate Number and size of areas classified as SPAs, contrary to Article 4 (1) and (2) of the Birds Directive**
- 2. Failure to apply the first sentence of Article 4(4) of the Birds Directive to the areas that should have been classified as SPAs**
- 3. Failure to transpose and apply the second sentence of Article 4(4) of the Birds Directive**
- 4. Inadequate transposition and application of Article 6(2)-(4) of the Habitats Directive**
- 5. Failure to transpose Article 10 of the Birds Directive. Obligation on Minister to encourage research**

Appendices

- Appendix 1 – List of Ireland’s Classified SPAs
- Appendix 2 – List of Ireland’s Designated SPAs
- Appendix 3 - Ringabella Estuary, Co Cork and its potential inclusion into the SPA Network
- Appendix 4 – Action Plan on outstanding issues
- Appendix 5 - Management of Fisheries and Aquaculture Activities in Natura 2000 sites in Ireland - Progress update, December 2013
- Appendix 6 - Fisheries Programme of Measures: Additional Information July 2015

SUMMARY

Background – The Birds Directive

[Directive 2009/147/EC](#) of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (this is the codified version of Directive 79/409/EC as amended) is the EU's oldest piece of nature legislation and one of the most important, creating a comprehensive scheme of protection for all wild bird species naturally occurring in the Union. It was adopted unanimously by the Member States in 1979 as a response to increasing concern about the declines in Europe's wild bird populations resulting from pollution, loss of habitats as well as unsustainable use. It was also in recognition that wild birds, many of which are migratory, are a shared heritage of the Member States and that their effective conservation required international co-operation.

The directive recognises that habitat loss and degradation are the most serious threats to the conservation of wild birds. It therefore places great emphasis on the protection of habitats for endangered as well as migratory species (listed in Annex I), especially through the establishment of a coherent network of Special Protection Areas (SPAs) comprising all the most suitable territories for these species. Since 1994 all SPAs form an integral part of the NATURA 2000 ecological network.

The Birds Directive bans activities that directly threaten birds, such as the deliberate killing or capture of birds, the destruction of their nests and taking of their eggs, and associated activities such as trading in live or dead birds, with a few exceptions (listed in Annex III - III/1 allows taking in all Member States; III/2 allows taking in Member States in agreement with European Commission). The Directive recognises hunting as a legitimate activity and provides a comprehensive system for the management of hunting (limited to species listed in Annex II - II/1 allows hunting in all Member States; II/2 allows hunting in listed Member States) to ensure that this practice is sustainable. This includes a requirement to ensure that birds are not hunted during the periods of their greatest vulnerability, such as the return migration to the nesting areas, reproduction and the raising of chicks. It requires Member States to outlaw all forms of non-selective and large scale killing of birds, (especially the methods listed in Annex IV). It promotes research to underpin the protection, management and use of all species of birds covered by the Directive (Annex V).

The case against Ireland – what it is all about

In December 2007, the Court of Justice of the European Union¹, arising from a case brought by the European Commission, delivered judgment on Ireland's

¹ Previously referred to as the European Court of Justice

implementation of the Birds Directive. The Judgment refers to six separate complaints and gives a ruling in respect of each one. The Court found in favour of Ireland in respect of one complaint.

In broad terms the Court found that Ireland:

- had not correctly transposed the Directive in a number of areas, including in relation to assessment of land use plans,
- had not designated a sufficient number of Special Protection Areas in respect of particular species, e.g. corncrake, kingfisher,
- had not designated SPAs in accordance with the required standard of protection,
- did not meet the required standard regarding the level of protection being achieved in SPAs or in areas that should be designated as SPAs, as set out in Article 4 of the Birds Directive or Article 6 of the Habitats Directive, in particular by failing to take all reasonable measures, including targeted action to prevent their deterioration, and by not requiring appropriate assessment for certain types of activities including aquaculture, and
- required protective measures outside SPAs have not been put in place.

The Timeline of the Birds Case Judgment

Case	Document	Date	Name of the parties
C-418/04	Application (OJ)	08/01/2005	Commission v Ireland
	See: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ%3AC%3A2005%3A006%3A0022%3A0022%3Aen%3APDF		
C-418/04	Order	17/03/2005	Commission v Ireland
	See: http://curia.europa.eu/juris/document/document.jsf?text=&docid=59931&pageIndex=0&doclang=en&mode=req&dir=&occ=first&part=1&cid=3100578		
C-418/04	Opinion	14/09/2006	Commission v Ireland
	See: http://curia.europa.eu/juris/showPdf.jsf?text=&docid=64070&pageIndex=0&doclang=en&mode=req&dir=&occ=first&part=1&cid=3100578		
C-418/04	Judgment	13/12/2007	Commission v Ireland
	See: http://curia.europa.eu/juris/showPdf.jsf?text=&docid=71717&pageIndex=0&doclang=en&mode=req&dir=&occ=first&part=1&cid=3101025		

C-418/04 Judgment (OJ)

23/02/2008

Commission v Ireland

See:

<http://curia.europa.eu/juris/showPdf.jsf?text=&docid=72029&pageIndex=0&doclang=en&mode=req&dir=&occ=first&part=1&cid=3101367>

Purpose of this Document

The Programme of Measures sets out the actions taken to date by Ireland in response to the Judgment of the Court together with commitments for further action to ensure that remaining issues have been dealt with. It is updated at 6-monthly intervals.

Copies of all correspondence on the case and any general queries may be directed or obtained from Alan Moore who is co-ordinating the case for Ireland at the address below:

Alan Moore
Assistant Principal Officer,
National Parks & Wildlife Service,
Department of Arts, Heritage and the Gaeltacht,
7, Ely Place,
Dublin 2.

Tel. +35318883206

Email: Alan.Moore@chg.gov.ie

Response to the specific findings against Ireland

New/amended items are highlighted in yellow in this section

First Complaint

1. *The Court found that Ireland had failed to classify all the most suitable sites - in number and size - as SPAs, contrary to Article 4 (1) and (2) of the Birds Directive*

The judgment refers to 42 sites and these are indicated in the tables in the Appendices 1 and 2 with colour coding for the species protected at each site. (There is an explanatory key to the coding at the end of each Appendix.)

First part of the first complaint

Classification

The classification process requires the statutory authority (i.e. Department of Arts, Heritage and the Gaeltacht) to notify owners and occupiers of land within or in the vicinity of the site, informing them of the extent and boundaries of the SPA, explaining the legal regime in force from the date of notification, identifying the special conservation interests and species that are protected on the site and prescribing a list of Activities Requiring Consent (ARCs – formerly called “notifiable actions”). All relevant consent authorities are also notified to ensure that from the date of notification they enforce all the protective measures required by the Birds and Habitats Directives in the exercise of their consent functions.

A total of 154 sites have now been classified in a manner consistent with the requirements of the Birds Directive (See Appendix 1).

<http://www.npws.ie/protectedsites/>

Confirmation of Classification through Statutory Instrument (S.I)

A total of 143 sites (93% of the SPA network of sites) have been designated by Statutory Instrument and Statutory Instruments for 3 are with the Minister for signature. 3 sites are currently being drafted for S.I. The boundary of one site (Blacksod Bay/Broad haven SPA 4037) is being extended, prior to S.I., to include an additional marine area.

The remaining 3 SPAs are within the appeals process and will be designated by S.I. as soon as the boundaries are finalised. Details of these sites are set out in a table at Appendix 2. The Statutory Instrument for Cork Harbour SPA 4030 will be revised to include the Ringabella Estuary extension.

<http://www.npws.ie/protectedsites/>

Species Selection

The Court further referenced certain bird species as being of particular concern either because of declining numbers or insufficient protection measures afforded to ensure their continued survival.

In response, Ireland has identified and classified all suitable locations on the basis of available scientific information within the suite of 154 SPAs for the following species: Red Throated Diver, Hen Harrier, Merlin, Peregrine, Golden Plover, Chough, Kingfisher and Corncrake.

The Short-eared Owl, also mentioned in the judgment, bred sporadically in the south-west in the 1960s and 1970s, and is occasionally recorded as possibly breeding. It is envisaged that habitat conservation measures in place for Hen Harrier, that is, extensive grazing of rough grassland, no afforestation of heath/bog will provide adequate measures for Short-eared Owl conservation.

Second part of the first complaint

Site Area

Ireland’s SPAs were reviewed in 2008² and Ireland has extended some selected SPAs to ensure that all the important ornithological areas of a site are included within its boundaries. It is considered that all SPA boundaries have the appropriate scientific justification. These sites are indicated with a double asterisk in the tables at Appendix 1 and 2 and all exceed in area their equivalent IBA site.

Outstanding Issues under the first complaint

Confirmation of Classification through Statutory Instrument

A large number of appeals against designation have been or are being processed. All appeals have passed through internal consideration by NPWS and reached the Appeals Board. The status of live appeals as of April 2019 is summarised below.

Corncrake SPA Appeals

Code	SPA	With Appeals Board	Change since Oct 2016
4083	Inishbofin, Inishdooney & Inishbeg	20	0
4149	Falcarragh to Meenlaragh	8	-12
4230	West Donegal Islands	6	0
	Totals	34	-12

Dunlin

² A review of the SPA network of sites in the Republic of Ireland. Unpublished report, NPWS, 2008

An extension to the Blacksod Bay SPA to include areas for breeding dunlin (*Calidris alpina schinzii*) was classified in June 2013 and an additional site for this species – Doogort Machair SPA, was also classified in July 2013.

Contact: Linda Bradley +3531 888 3260

Email: linda.bradley@ahg.gov.ie

Corncrake

151 calling males were confirmed in Ireland during the 2018 breeding season and this is the first recorded increase since 2014. This figure represents an 8% increase on the 140 individuals confirmed in 2017. Donegal remains the national stronghold, with 90 confirmed calling males (60% of the national total). West Connacht, which comprises the western seaboard of counties Mayo and Galway, held 59 males (39% of the total). Two calling males were recorded in Templeboy, Co. Sligo. No corncrakes were recorded in the Shannon Callows. Offshore islands held 53% of the national population. At a regional scale, islands accounted for 66% of the population in Donegal and 33% of that in West Connacht. The Corncrake Special Protection Area (SPA) network held 48% of the national population, accounting for 66% and 22% of numbers in Donegal and West Connacht respectively. Compared to 2017, there was an overall 14% increase in numbers recorded within the network. All SPAs, except for the Mullet SPA, saw an increase in numbers.

Conservation measures in 2018 again included habitat management and the administration of grant schemes. Over 640 ha of land were entered in one of four NPWS and DAFM schemes in 2018. A total of 125 participants entered the Corncrake Grant Scheme (CGS), covering an area 353 ha nationally. Ten NPWS Corncrake Farm Plans (6 in Donegal and 4 in West Connacht) had a combined plan area of 64 hectares, 64 GLAS plans covered 209 ha in the country and land management agreements extended over 15 ha. Looking at the total land area eligible for the CGS within 250m of all Corncrakes nationally, 69% of this was entered in the CGS, the Farm Plan Scheme or the Corncrake measure in GLAS. No conservation measures were implemented on the remaining 31% of eligible land area; the vast majority of this area was outside of SPAs.

The Predator control programme was carried out again this year in Donegal, West Connaught and the Shannon Callows.

A Corncrake Framework Strategy (*A Framework for Corncrake Conservation to 2022*) has been prepared and can be found on the Department's website.

The main actions listed in the framework strategy are to:

- monitor the core Corncrake populations in Ireland on an annual basis;
- complete the SPA designation process for Corncrake;
- maintain the traditional Corncrake Grant Scheme as a conservation tool for the protection of nesting birds both within the SPA network and in the wider countryside;

- set targets to achieve population growth in the SPAs and to underpin these targets with complementary targets for habitat management in these areas;
- continue to refine and promote relevant multi-annual agri-environment schemes; and to
- continue to enter into management agreements with landholders in important areas in order that land can be exclusively managed as Corncrake habitat.

Complementing the actions set out in the Corncrake strategy, the Department of Agriculture, Food and the Marine has had a series of corncrake measures in its agri-environment Schemes.

Ireland's current Rural Development Programme includes a specific spatially targeted action for the conservation of the Corncrake within the new Agri-Environment scheme (GLAS). This action promotes traditional management practices which are favourable for the conservation of the corncrake, for example the adoption of specific grazing management practices, restrictions on field operations and the adherence to strict cutting practices within the designated areas. Also included is a mandatory requirement for scheme participants to create early cover for the species upon arrival in late Spring/early Summer. Similar to actions under previous schemes, it is targeted at priority Corncrake SPAs, but now excluding the Shannon Callows. In addition, it now affords priority 1 entry to the scheme and as such is available to all farmers in these areas. This action will be complementary to other actions within the Corncrake framework strategy.

This action is now mandatory for any farmers applying to GLAS who have land in corncrake SPAs, whereby scheme participants must enter at least 30% of their land into the Corncrake measure.

In 2018, a total of 64 farmers had GLAS contracts in corncrake SPAs, managing 209 ha of habitat, a very slight decrease on 2017.

Some of the targets in the Corncrake Strategy have been reached well ahead of the deadline. It is recognised that ultimately, the success of the Strategy depends on positive engagement by farmers and non-farming landowners. To that end, NPWS provided training sessions in Q3 2015 to farm planners and agricultural advisors on the ecological requirements of Corncrake including practical demonstrations on the maintenance, creation, enhancement of habitat. The planners present represented the majority of planners that are designing GLAS plans. There continues to be regular liaison between farmers and DCHG. It is envisaged that some piloting of a results-based scoring of the quality of habitat delivered in agri-environmental plans for Corncrake will prove useful towards ensuring higher quality habitat is incentivised and lower quality habitat is dissuaded in future AES.

Locally-Led Project (European Innovation Partnership)

The European Innovation Partnership by the name of Cúlra Créafóige was approved in 2018, to deliver various outputs, including habitat for Corncrake and benefits for the wider community (including increased farm viability, opportunities for the local youth population, tourism and micro-business prospects). The financial returns to farm families and individuals, including peripheral benefits outside the cultivation itself, will be a key focus of the EIP activities. It is intended that the investment in this project will stimulate worthwhile engagement and personal advancement of up to 300 individuals.

The project's primary goal is to explore alternative cultivation options for the rough pasture, rush pasture and scrub area within the local area. The combined total of these 3 habitats or land management types is 134.7 hectares or 44% of the Falcarragh to Meenlaragh SPA area in which the project is based. It is envisaged that the project will at Peak cultivation, in Year 5, deliver 24.3 hectares of crops within the local area.

Other

In addition to the possible avenues/grants for biodiversity/conservation projects, other proactive community projects can be supported. In January 2019, National Parks & Wildlife Service, along with associated beneficiaries, submitted a detailed and costed application to the European Commission for LIFE funding, to deliver further necessary action for Corncrakes.

Compensatory Habitat - Dublin Bay

The Court found that Ireland should have designated the inner part of the Tolka estuary, and that an area of 2.2 ha had been lost due to the Dublin Port Tunnel development. The Commission indicated that Ireland must provide compensatory habitat to cover the loss of this area to redshank, curlew and oystercatcher.

The Irish authorities were committed to compensating for this habitat loss. All suitable areas within Dublin Bay were already designated and included relevant habitats or species of interest (sites 800004006, North Bull Island, SI 212/2010, and 800004024, South Dublin Bay and River Tolka Estuary, SI 211/2010).

The possibility of converting *Spartina*-infested saltmarsh to mudflat at sites such as Baldoyle and Rogerstown was also considered, but rejected on the grounds of potential damage to habitats which are qualifying interests for the SAC designation of these sites.

All sites with the potential for compensatory designation on the east and south east coasts were considered. The sites reviewed (given here with the last 4-digit site code) include Carlingford Lough (4078), Dundalk Bay (4026), Boyne Estuary (4080), , Nanny estuary (4158), Wexford harbour (4076), Bannow (4033) and Tramore 4027) Bays, Ballyteigue (4020),

Dungarvan (4032) and Ballymacoda (4023). No mudflats remaining undesignated, and with the relevant species, were identified.

A suitable site was eventually found in Ringabella Estuary in Cork and the Cork Harbour SPA (4030) has been extended by 74.14 hectares to include an area of intertidal mudflat that can support a similar waterbird assemblage as the area that was in-filled in Dublin Bay. This extension to the Cork Harbour SPA was advertised and notified on the 11th March 2015. The current Statutory Instrument for Cork Harbour (S.I. 237/2010) will be revoked and a new Statutory Instrument drafted to designate the new, enlarged site

More comprehensive information on Ringabella and the Tolka are provided in Appendix 3 below.

Ireland will shortly make a notification to the Commission in the context of Article 6(4), paragraph 1, about the compensatory measures undertaken.

(The Second Complaint was rejected by the Court.)

Third Complaint

- 3. The Court found that Ireland had failed to apply the provisions of the first sentence of Article 4 (4) of the Birds Directive to the areas that should have been classified as SPA, i.e. to take appropriate steps to avoid deterioration of habitats or disturbance of birds within these areas.**

To address this complaint and a number of other legal transposition issues in relation to this judgment and other judgments against Ireland in relation to the implementation of the Habitats Directive, the Minister for Arts, Heritage and the Gaeltacht made comprehensive new transposition regulations in September, 2011 – the European Communities (Birds and Natural Habitats) Regulations, 2011 – referred to in this document as the 2011 Regulations. (Complementary transposition provisions are to be found in the Planning and Development (Amendment) Act, 2010.

Regulation 15 of the 2011 Regulations provides for the identification and notification to landholders and to the public of “candidate special protection areas”. The Minister may make a direction specifying activities that may not be carried out without his or her consent, and the provisions of Regulation 42 (appropriate assessment).

Regulation 27(4) obliges public authorities in the exercise of their functions, to “take the appropriate steps to avoid, in candidate special protection areas, pollution and deterioration of habitats and any disturbances affecting the birds insofar as these would be significant in relation to the objectives of Article 4 of the Birds Directive”. Also, Regulation 35 (General provisions for the prevention of damage to European Sites) applies to candidate SPAs. These provisions combine to provide a strong legal mechanism for the protection of unclassified sites as required Article 4(4).

Fourth Complaint

4. The Court found that Ireland had failed to transpose and apply obligations to protect birds in the wider countryside as required by Article 4(4) of the Birds Directive

Wider Countryside Measures

In response Ireland has introduced new measures, and built upon existing activity, to benefit the conservation of birds in the wider countryside.

Under the new Rural Development Programme, DAFM has developed a range of targeted actions within GLAS to assist in the conservation of threatened species where they pertain to farmland within Natura 2000 and in the wider countryside. These measures which have been developed in tandem with DCHG are tailored to complement existing actions for a wide range of species. GLAS is a highly targeted scheme, and key to its design was the identification of a number of Priority Environmental Assets, primarily related to vulnerable habitats including Natura and uplands/commonages, but also including others such as high status and vulnerable water sites which are key to maintaining aquatic biodiversity. The corncrake action is one of seven key bird groupings having a specific spatially targeted action, with the others being Grey partridge, chough, breeding waders, twite, geese and swans and hen harrier.

All holdings with target habitats for these species have been pre-identified and the areas of importance mapped at farm level. The presence of one or more of these habitats (environmental assets) on any farm guarantees priority access to the new scheme. Apart from the 7 bird actions prioritised under GLAS in the RDP, which have many indirect benefits for other bird species, a range of other actions have been included in the Scheme to enhance the availability and quality of farmland habitats for birds

For example (figures in brackets show farmer participation levels) the hedgerow planting (7455) and rejuvenation actions (coppicing (5013) and laying (1482) will improve the range and quality of nesting and foraging habitat for a number of bird species including owls and kestrels. The wild bird cover action (7467), which involves planting wild bird cover seed mixture, will benefit a range of birds but will particularly benefit seed eating birds such as yellowhammer and skylark. This action has been given tier 1 priority status to ensure a high level of uptake. The low input permanent pasture (27877) and traditional hay meadow (9853) actions, which support the development of more traditional rough grazing areas and meadows, will have wide ranging benefits for a number of species but will especially benefit ground nesting species such as snipe and , whinchat. Another action supports a range of species through the installation of bird boxes (11,816). The GLAS specification also encourages farmers to think wildlife at all times and follow the code of good practice for the responsible use of rodenticides to minimise the impacts on non-target species such as owls and other birds of prey.

In addition to the above, key actions for water quality include riparian margins and the protection of watercourses action.

See GLAS terms and conditions and specifications for further details.

<https://www.agriculture.gov.ie/media/migration/farmingschemesandpayments/glastranche2/GLASTCsTranche2031115.pdf>

Other relevant activities include:

The Department has drawn up a draft Prioritised Action Framework for 2021-27 which identifies Ireland's priorities for nature conservation related to the EU Nature Directives. Consultation with departments and stakeholders is required before the final draft will be concluded.

The Locally Led Agri-Environment Scheme for Hen Harrier is underway. This Scheme being rolled out by the Department of Agriculture, Food and the Marine under the European Innovation Partnership measure of the Irish RDP. The Hen Harrier scheme will be the single biggest of these new partnerships, with a budget of between €20-25m. Its main objectives include the sustainable management of farmland in the most important areas for Hen Harrier, with a strong socio-economic focus in these marginal agricultural areas, and fostering good relations through locally-led solutions between farmers, State bodies and other stakeholders.

In addition to Hen Harrier EIP and other EIPs referenced elsewhere, there are 21 other EIPs operational, with a total budget of €74m earmarked. It is hoped that this initiative which Ireland is to the forefront on, can expand in future, particularly if positive results flow from the initial round of EIPs. It is also hoped that learnings arising from the initial EIPs can inform future approaches to agri-environmental measures.

Some of the EIPs that should be of direct benefit to birds in the wider countryside (as well as within designated sites) include:

- North Connemara Locally Led Agri-environmental Scheme
<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/north-connemara-locally-led-agri-environmental>
- Caomhnú Árann :Managing the habitats of the Aran Islands to maximise their agricultural & ecological output
<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/caomhn%C3%BA-%C3%A1rann-managing-habitats-aran-islands>
- A Sustainable Agricultural Plan for the MacGillycuddy Reeks - Conservation and restoration of Upland Habitat in the MacGillycuddy Reeks
<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/sustainable-agricultural-plan-macgillycuddy-reeks>
- BRIDE - Biodiversity Regeneration in a Dairying Environment
<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/bride-biodiversity-regeneration-dairying>
- Blackstairs farming Futures (BFF) Sustainable farming project in the Blackstairs Mountains

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/blackstairs-farming-futures-bff-sustainable>

- Sustainable Uplands Agri-environment Scheme (SUAS)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/sustainable-uplands-agri-environment-scheme-suas>

Engagement between the Forest Service of DAFM and DAHG on biodiversity elements in the management of forestry.

The DAFM funded SHINE project in University College Cork; it will investigate Hen Harrier distribution and breeding success in relation to forest management practices and climate; identify threats to Hen Harriers in relation to forest management; examine the role of forest management in enhancing habitat value of forests for Hen Harriers; determine the vulnerability of Hen Harriers to predation and disturbance; and investigate the role of post-clear felling brush management on Hen Harrier breeding ecology;

Review alternatives to Red Zone Areas for conservation management;

The Grey Partridge Project in Co. Offaly and the inclusion of a grey partridge action as a priority 1 action in GLAS. The target areas for this action have been extended from the previous AEOS target area, area and further expansions are being considered for Tranche 3 of GLAS.

Partridge projects are underway in Fingal and Co. Wicklow, and being planned for Donegal.

Curlew

The first national survey of breeding Eurasian Curlew *Numenius arquata*, was undertaken by the National Parks and Wildlife Service between 2015 and 2017. The results were published in *Wader Study*, the peer reviewed journal of the International Wader Study Group³. The primary objective of the survey was to establish a minimum population estimate for the Republic of Ireland and record the locations of breeding territories. In total, 138 breeding pairs of Curlew were recorded. Based on extrapolations from previous population estimates, this represents a population decline of at least 96% in less than 30 years.

The possibility of Curlew becoming extinct as a breeding species in the coming years, is one of the greatest conservation concerns in Ireland. Decades of habitat loss and fragmentation and losses to predators have seen the species decline in numbers by 96% since the late 1980s/early 1990s. Unfortunately, these threats are very much present and active.

Confirmation of the severity of decline led to the establishment of a Curlew Task Force in January 2017 and a Curlew Conservation Programme aimed at increasing the productivity of remaining Curlew pairs.

³ O'Donoghue et al. 2019. National survey of breeding Eurasian Curlew *Numenius arquata* in the Republic of Ireland, 2015–2017. *Wader Study* **126**, 43-48. DOI: 10.18194/ws.00130 (<https://www.waderstudygroup.org/article/12008/>)

In January 2017, a national Curlew Task Force (CTF) was formed, to include various stakeholders with a say in the management of the Curlew and its habitat. While the Department of Culture, Heritage & the Gaeltacht facilitated the Curlew Task Force, it was felt important to have an independent Chair, so that all stakeholder contributions were independently reflected in the recommendations of the Task Force. In addition to individuals with significant experience of Curlew conservation, various stakeholders from Government, industry, conservation and academia, contributed to the CTF. The CTF met formally 6 times across 2017 and 2018 (with numerous other sub-meetings and engagements) and the recommendations of the CTF were drafted in November 2018. They are currently awaiting finalisation by the Independent Chair, and will be submitted to Minister for Culture, Heritage & the Gaeltacht.

The Curlew Conservation Programme has been designed and implemented by NPWS/DCHG to deliver action on the ground. In addition, a specific European Innovation Partnership project on breeding Curlew in South Leitrim and the southern end of Lough Corrib has begun.

Wider Governmental policy will need to further evolve and improve to prevent the loss of breeding Curlew in Ireland and it is expected that outputs of the Curlew Task Force will provide recommendations on various policies.

Curlew Conservation Programme

The Curlew Conservation Programme is a pilot effort for a new approach to Curlew conservation in Ireland. It was introduced in 2017 and is coordinated by the National Parks & Wildlife Service of the Department of Culture, Heritage & the Gaeltacht and involves a wide range of actors, proactively working to help Curlew. Central among these are the landowners where Ireland's last remaining Curlew breed.

The Curlew Conservation Programme provides a wide ranging and comprehensive framework that includes habitat maintenance, enhancement and creation; survey effort, nest protection; public and community engagement and much more.

There are two main pillars within the Curlew Conservation Programme; one which delivers on the ground action and another which progresses research for a species that has received little attention in Ireland heretofore. Both pillars are closely intertwined and complementary. A locally-led approach is taken, whereby seven important locations for breeding Curlew in Ireland each have a locally-based team, working with local people and adapting techniques, efforts and priorities to what works best locally.

Local teams, known as Curlew Action Teams (CATs), were comprised of three main roles:

A Curlew Conservation Officer

A Nest Protection Officer

A Curlew Champion.

An assistant role was assigned to CATs where required.

The Curlew Conservation Programme sees direct efforts in the following areas:

Stack's Mountains (County Kerry)

Lough Corrib (northern)

Lough Ree

North Roscommon/East Mayo

Midland North Leitrim

North Monaghan

Donegal

The Curlew Conservation Programme is well received on the ground, where the local teams liaise closely with landowners and local communities, in the search and protection of breeding Curlew.

A number of significant habitat works have been undertaken to date, which should benefit Curlew into the future.

Pairs and nests have been located and breeding outcomes determined.

Temporary electric fences have been applied and worked well in safeguarding clutches of eggs from ground predators.

Local communities, landowners, gun clubs and other groups have been very much brought into the conservation movement under this programme – they are part of the project, not apart from it.

The Curlew Conservation Programme continues to build skillsets, experience and momentum. The programme is widely supported, both nationally and internationally and most importantly in the local areas where Curlew are breeding.

The approach adopted by the Curlew Conservation Programme has received plaudits from peers nationally and internationally. It is important to recognise also, that there are legacy and ongoing issues at a larger scale on the landscape and it is envisaged that the recommendations of the Curlew Task Force will provide a blueprint for policy and action going forward, to accompany the efforts of the Curlew Conservation Programme and indeed the “Irish Breeding Curlew European Innovation Partnership” which is operational in South Lough Corrib and South Leitrim).

It is hoped that the Curlew Conservation Programme will continue into the future, acting for Curlew conservation with local people and learning valuable lessons along the way in what is essentially a pioneering project to support a species that is a very well respected part of the Irish avifauna, landscape, culture and heritage.

Irish Breeding Curlew EIP

The project aims to prevent further losses to the Irish Curlew population through the protection and enhancement of known Curlew breeding sites in Lough Corrib (south) and South Leitrim, and also to educate and compensate farmers and rural dwellers for creating and managing Curlew habitats.

To achieve these goals, the project will pursue the following

- Trial innovative methods on both farmland and bog habitats, to reduce predation
- protect and enhance suitable habitat, both at the site and landscape level &
- Establish baselines and targets for breeding success, habitat condition,
- landowner participation, predator densities and capital works.

Determine Curlew Breeding outcomes by assessing the behaviour of adults and monitoring for the presence of juveniles and fledged young.

Trial the use of temporary electric fences

Train farmers/landowners to undertake direct predator control.

Direct control of generalist predators (foxes, corvids and mink) at known nest sites.

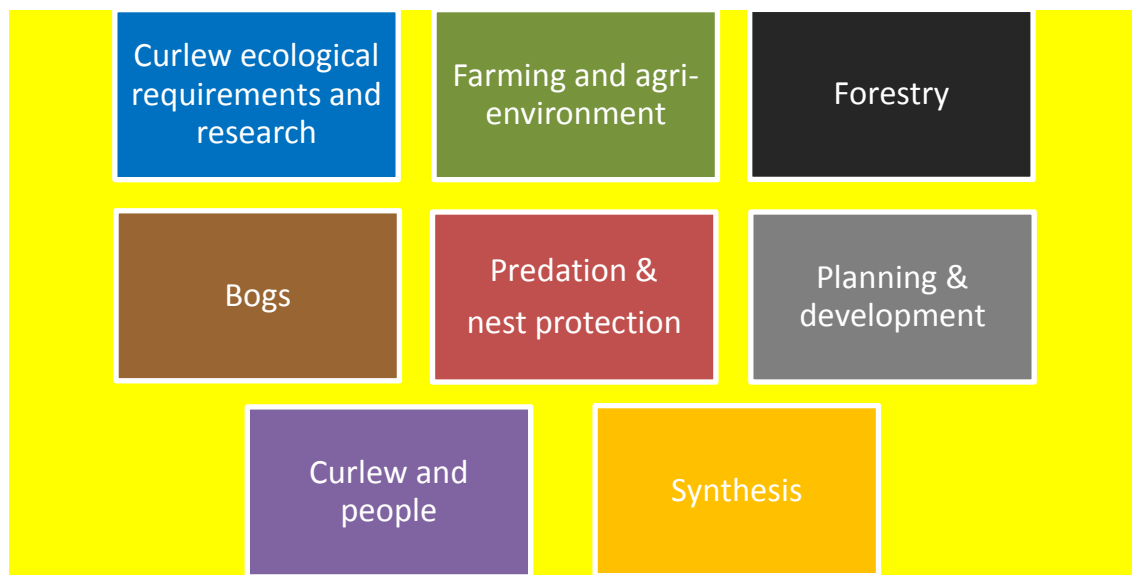
Enhance habitats through capital works.

Trial a hybrid agri-environmental scheme combining a results-based approach with some prescriptive elements specifically for Curlew.

Monitor the extent to which peat extraction is causing disturbance to nesting habitat by mapping the extent and timing of active turf cutting.

Curlew Task Force

Between February 2017 and November 2018, there were six dedicated Curlew Task Force meetings, attended by over 30 representatives from various sectors and backgrounds. Representation was for the most part reserved for one representative per stakeholder organisation. These representatives were offered the opportunity to contribute to various aspects of the overall discussion, but had more focussed input into issues they were directly associated with. To do so, the Curlew Task Force was segmented into seven separate focus groups as presented below. Each group had a rapporteur who animated discussion among fellow group members and reported back to the overall Task Force. The individual groups focussed on what are considered to be the primary matters pertaining to Curlew conservation in Ireland in the 21st century. In addition, a synthesis group coordinated the collation of each focus group's recommendations, into the output document that is presented here. The synthesis group also identified cross-cutting themes and narratives presented that emerged from the various group discussions and made recommendations where these were overarching.



The chapters of this CTF recommendations are a representation and a distillation of the discussions and recommendations of each focus group.

In addition, data from the national survey was important in targeting and prioritising farmers in Curlew breeding territories for entry to GLAS, where they are financially incentivised to manage the habitat for Curlew. The NPWS continue to provide and update the Forest Service with locations of breeding Curlew so that this information is available in assessing afforestation applications. The Forest Service are applying an interim protocol in considering afforestation applications in Curlew territories and the Curlew Task Force will provide recommendations on this interim protocol, with a view to its enhancement and improvement.

The Curlew Conservation Programme of the NPWS/DCHG has also issued local community grants to small scale projects aimed at supporting breeding Curlew.

Ireland was to the fore with World Curlew Day, which is seen as important in championing the need to conserve our native Curlew.

Other projects

The EU-funded “Results-based agri-environment pilot scheme (RBAPS)” project focusses in Ireland on Lowland semi-natural grasslands in County Leitrim and the Shannon Callows. The main thrust of the project is trialling a new results based approach to payments under agri-environmental schemes to deliver greater return for biodiversity and the European tax payer. Details of the scheme can be found at <http://www.rbaps.eu>

Cooperation between a range of key groups to produce a species action plan for Red Grouse – see <http://www.greypartridge.ie/conservation/irish-red-grouse-species-action-plan.429.html>; and collaboration at 14 sites around the country between hunters, farmers, NGOs and the State sector on habitat management to benefit the red grouse.

Collaboration with agencies and NGOs on birds (breeding waders, Hen Harrier , red grouse etc.) under the INTERREG VA (2014-2020) Programme.

Cooperation between DAHG, the DAFM’s Regional Veterinary Service and Pesticide Registration and Control Division, the State Laboratory, the Golden Eagle Trust and BirdWatch Ireland in relation to the reduction of poisoning risks to reintroduced large raptors and other native raptors and owls.

The publication of annual reports on investigations on birds of prey deaths in Ireland– see [http://www.npws.ie/sites/default/files/general/Recording%20and%20Addressing%20Persecution%20and%20Threats%20to%20Our%20Raptors%20\(NPWS%20website\)_o.pdf](http://www.npws.ie/sites/default/files/general/Recording%20and%20Addressing%20Persecution%20and%20Threats%20to%20Our%20Raptors%20(NPWS%20website)_o.pdf)

The Campaign for Responsible Rodenticide Use in Ireland (CRRU Ireland) was launched in September 2013 and is still actively working.

Ongoing implementation of the Wildlife Acts and the Birds and Habitats Regulations, 2011

Implementation of the EIA Agriculture Regulations of 2011.

State-funded awareness and other activities by key NGOs including Birdwatch Ireland, Irish Raptor Study Group, Golden Eagle Trust, Irish Red Grouse Association etc.

Removal of curlew from Open Seasons Order in 2012

Ban on the sale of woodcock in 2015 to reduce hunting pressure

Work by BirdWatch Ireland on barn owl collisions with traffic, funded by Transport Infrastructure Ireland

The DAFM 2015 Competitive Call for Research Proposals (see <http://www.agriculture.gov.ie/research/2015competitivecallforresearchproposals/>) includes the following call under the Forest Research category, which is directly relevant to the development and implementation of the Hen Harrier TRP but potentially beneficial to a wider suite of species:

C.6 Ecosystem Services – Biodiversity: Research appropriate forest planning and management within hen harrier habitats.

Research should evaluate and address the interaction of forests and forest management with hen harrier and identify opportunities and constraints for existing and/or future forest expansion and production (limited to Small Project [up to 2-year duration, up to €200,000 funding – see the Call Specification document for details]).

Specifically, research into practical site-focused planning and management measures that: ¾¾ increase the habitat value of forests for Hen Harrier throughout the forest rotation, through the application of (for example) varied rotation lengths, the design and management of forest-related open space, targeted forest removal and site restoration; and reduce the influence of pressures such as predation, fire and operational disturbance on Hen Harrier breeding and fledgling success within forest-related habitats (e.g. 2nd rotation pre-thicket forest, ridelines).

Project proposals have been received are currently being evaluated.

An Action Plan for the Wider Countryside

DECLG and DAHG grant aided BWI's implementation programme of group species action plans for birds in Ireland until 2015. The project worked to facilitate and deliver on the implementation of Action Plans (previously funded by DEHLG 2009 – 2011), including development of multi-stakeholder-based funding applications and identify partnership working opportunities; effective communication of the outputs of the plans and follow on steps with all stakeholders; assisting in the incorporation of actions assigned to the stakeholders into their respective business plans; assistance in the reporting on the status of Irish birds across the national territory; and in policy development areas that require particular focus such as land management and species protection.

The 10 Group Species Action plans were reviewed by BirdWatch Ireland where species-specific priorities and other priority issues/policies were identified. The review was provided in the report "BirdWatch Ireland's Group Species Action Plans for Irish Birds: Prioritisation of actions, species priorities and implementation" and can be accessed at <http://www.birdwatchireland.ie/LinkClick.aspx?fileticket=a%2bb%2fvdQUngs%3d&tabid=1426>

As BirdWatch Ireland's action plans span 10 individual but overlapping groups of birds covering some 450 actions this prioritisation approach was a necessary step to ensure

that the correct species and the appropriate actions attracted the most conservation focus. The report includes a review of implementation to date.

The prioritisation exercise identified two groups breeding waders (including Curlew, Lapwing and Dunlin) and farmland birds (including Skylark, Whinchat, Twite, Corncrake, Grey Partridge and Barn Owl) that would most benefit from management measures. Agri-environment measures are in place that will have both direct and indirect benefits for most of these species. Relevant measures include low-input permanent pasture and traditional hay meadow. DAHG is currently considering what additional work, if any, is necessary for whinchat, which is not currently targeted by a specific measure. When the structure of LLAES schemes is finalised, and GLAS is fully operational, including ongoing revisions to some measures, further analysis of what other gaps exist in regard to key groups

It is also expected that some species such as skylark and meadow pipit that were severely affected by the freezing conditions in 2010 will show a recovery from the losses noted in the Article 12 report.

Fifth Complaint

5. The Court found that Ireland had not adequately transposed or applied of Article 6(2)-(4) of the Habitats Directive, i.e. to ensure that SPAs were not subject to deterioration, to ensure that plans or projects which could have an adverse impact on SPAs were subject to appropriate assessment in the decision making process.

5a) Birds and Natural Habitats Regulations

In response to this element of the judgment DAHG and DECLG have undertaken a programme of legislative changes to address the transposition issues. As referred to above these include a of comprehensive revision of the planning code and of the 1997 Habitats Regulations. See revised European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477/2011). An amendment to the Regulations is currently being completed to fully align the classification and designation procedures.

<http://www.irishstatutebook.ie/2011/en/si/0477.html>

and the Planning and Development (Amendment) Act, 2010

<http://www.irishstatutebook.ie/2010/en/act/pub/0030/>

4b) The Court specifically found inadequate transposition of Article 6(2) in relation to the controls of recreational activities in protected sites.

Control of Recreational Activities

In response, on 18th June 2010, new regulations were issued governing recreational activity (in particular, the use of recreational vehicles and watercraft).

See: European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010 (S.I. No. 293/2010). These are now incorporated within the 2011 Regulations.

<http://www.irishstatutebook.ie/2010/en/si/0293.html>

4c) The Court further found that Ireland had failed to comply with Article 6 (3) and (4) of the Habitats Directive in respect of plans.

Planning and Development Amendment Act

The Planning and Development (Amendment) Act 2010 includes amendments to underpin the legal basis for Appropriate Assessment to be carried out for any plan or project which may impact on the integrity of a Natura site: these provisions have been commenced.

See: **Planning and Development (Amendment) Act 2010**

<http://www.irishstatutebook.ie/2010/en/act/pub/0030/index.html>

DECLG contacted planning authorities by way of circular letter (PSSP 5/2011 on 1 July 2011) to ensure compliance of existing development plans and local area plans with

the Directive, notwithstanding the ongoing variations and reviews of existing plans by planning authorities in the context of their statutory reviews and core strategy obligations under the Planning and Development (Amendment) Act 2010, all of which are also subject to the Habitats Directive appropriate assessment process under the 2010 Act delivering comprehensive compliance in this regard thus further expediting the elimination of any residual 'existing plans'. There are also existing time-bound requirements for periodic review of forward plans, independent of the Department's specific instruction regarding any non-compliant plans or part of a plan. Any non-compliant plans therefore are subject to a statutory sunset in addition to the Department's efforts to expedite the elimination of 'existing plans'.

The Department contacted planning authorities by way of circular letter (PL 16/2013 of 28 August 2013) reminding all planning authorities to ensure that any non-compliant plans are brought into compliance in a timely manner. The Department specifically requested those planning authorities who have 'existing plans' in place which encompass Hen Harrier SPAs to fully satisfy themselves as to the compliance of their land use plans (both development plans and local area plans) that pre-dated the commencement of the relevant 2010 Act provisions, paying particular attention to the zoning of environmentally sensitive lands for major developments, e.g. wind farms, where there are sensitivities in regards to the Hen Harrier SPAs. The Department reported the outcome of this analysis to the Commission (Letter from Planning Section on 19 November 2013 – see position as set out below) and confirmation from the relevant planning authorities regarding compliance of their land use plan objectives with the Planning and Development (Amendment) Act 2010. In this context, it is not deemed necessary and accordingly not proposed to make further amendments to primary legislation on this issue, especially as the existing provisions in the Planning and Development (Amendment) Act 2010 are being implemented sufficiently. However, the Department continues to keep the matter under consideration and monitors compliance of both existing and new plan objectives.

Hen Harrier SPAs (Laois, Offaly, Cork, Kerry, Limerick, Tipperary, Monaghan, Clare and Galway)

The position in regard to the nine planning authorities with Hen Harrier SPAs (Laois, Offaly, Cork, Kerry, Limerick, Tipperary, Monaghan, Clare and Galway) is as follows:

Eight of the planning authorities (Laois, Offaly, Kerry, Limerick, Tipperary, Monaghan, Clare and Galway) concerned have confirmed that their relevant plans are fully compliant with the Habitats and Birds Directives.

In the case of Cork County Council, the Council has outlined that, in relation to the existing County Development Plan 2009-15, the plan does not contain wind energy land-use zoning maps. However, it does contain a Wind Energy Strategy which includes an indicative map (unscaled) identifying certain parts of the county as “strategic search” areas, where developers are encouraged to focus efforts in the identification of suitable sites for wind energy initiatives. Some of these search areas partially overlap with mountainous and upland areas running from the Stacks to Mullaghareirks and West Limerick Hills Special Protection Area which is designated for the protection of Hen Harriers. Importantly, the objective relating to the strategic search area (INF 7-4) states that, in considering the merits of particular planning applications in such areas, the Planning Authority will have regard to ‘the impact of nature conservation, in particular avoiding designated and proposed European sites’.

Furthermore, the Council’s wind energy strategy is currently being reviewed in the context of the review of the County Development Plan (the draft plan was published for first round of public consultation in January 2014).

The County Cork Hen Harrier SPAs (Sites 4161 and 4162) are all within the Normally Discouraged Zones as identified on the Wind Energy Strategy Map in the draft County Development Plan as published in December 2013. In addition, it has been proposed through the material amendments to include a 500m buffer around these sites to be included in the Normally Discouraged Zone.

It is further proposed through the material amendments

- to include all Natura 2000 sites within the Normally Discouraged Zone (some parts of some Natura 2000 sites had not been included within this zone on publication of the draft CDP); and
- to include an 800m buffer around SPAs designated for the protection of Wetlands and Waterbirds within the Normally Discouraged Zone.

The proposed policy for the Normally Discouraged Zone is as follows:

ED 3-6 Commercial wind energy developments will be discouraged in these area which are considered to be sensitive to adverse impacts associated with

this form of development (either individually or in combination with other developments). Only in exceptional circumstances where it is clear that adverse impacts do not arise will proposals be considered.

The Public Consultation phase for the proposed material amendments on the draft Cork County Development Plan closed on 2 October, 2014. Following this the Cork County Development Plans scheduled to be adopted before 8 January, 2015.

Remaining Planning Authorities and Compliance with the Habitats Directive

The focus of the Commission to date has been on the existing plans relating to the hen harrier (i.e. the 9 counties which was the basis of the original concerns of the Commission) which are reported on above. In October 2013 the Department made a commitment to provide information on all counties compliance with the Directive. In this regard, the Department contacted the remaining 19 planning authorities specifically requesting those authorities who have ‘existing plans’ in place to fully satisfy themselves as to the compliance of their land use plans (both development plans and local area plans) that pre-dated the commencement of the relevant provisions of the Planning and Development (Amendment) Act 2010.

The position established in regard to these 19 planning authorities (Carlow, Cavan, Donegal, Dun Laoghaire Rathdown, Fingal, Kildare, Kilkenny, Leitrim, Longford, Louth, Mayo, Meath, Roscommon, Sligo, South Dublin, Waterford, Westmeath, Wexford and Wicklow) is summarised as follows (including in the table below):

- A total of 12 planning authorities (Cavan, Dun Laoighaire Rathdown, Kilkenny, Leitrim, Louth, Mayo, Meath, Roscommon, Sligo, South Dublin, Waterford and Westmeath) have confirmed that their relevant plans are fully compliant with the Habitats and Birds Directive.
- A total of 8 planning authorities (Carlow, Cork, Donegal, Fingal, Kildare, Longford, Wexford and Wicklow) indicated that they have made town or village plans that are being revised to include statements to the effect that these plans are in full compliance. Screening of all planning applications for AA will be strictly applied in the areas covered by these plans. However, it is very important to note that the plans of these planning authorities are for **urban areas** that do not contain relevant habitats and the revisions will be primarily aimed at demonstrating that any adverse effects on the relevant habitats are not anticipated.

The Department will continue to monitor both existing and new plan objectives to ensure of their compliance with **Article 6 (3) and (4) of the Habitats Directive**

The table below sets out in more detail the position for each planning authority:

COMPLIANCE OF EXISTING LAND USE PLANS WITH THE EU HABITATS DIRECTIVE				
Local Authority		Full Compliance	Compliance Statement Required	Plans to be revised to ensure full compliance
1	Carlow		☒	<p>Carlow Co Co are currently in the process of tendering for the relevant environmental screening reports for Tullow, Bagenalstown, Borris, Rathvilly and Leighlinbridge. Tinnahinch due to its population of under 300 will not have its local area plan continued. All LAP's will comply with the Habitats Directive.</p> <p>Carrickduff Local Area Plan 2009 – 2015 will not, however, be reviewed and will be allowed to lapse – covered by the County Plan which complies with the Habitats Directive.</p>
2	Cavan	☒		
3	Clare	☒		
4	Cork (City & County)		☒	<p>County Development Plan 2009-15 is currently under review and the new plan is due to be adopted in January 2015 (see above).</p> <p>Clonakilty, Fermoy, Mallow and Youghal Town DP will be replaced by Local Area Plans as part of review of existing Electoral Area LAPs for Cork County. The review of existing Electoral Area LAPs for Cork</p>

				County is due to commence on 14 th December 2015 and will comply with the Habitats Directive.
5	Donegal		?	Ballyshannon LAP - Work has commenced in the making of a new plan for Ballyshannon which will comply with Habitats Directive. It is anticipated that the Local Area Plan will be made no earlier than March 2015.
6	Dun Laoghaire Rathdown	?		
7	Fingal		?	Dublin Airport LAP – Review of this LAP due to commence early 2016 and will comply with Habitats Directive.
8	Galway	?		
9	Kerry	?		
10	Kildare		?	Sallins LAP – Currently under review, due for adoption in Feb 2016 and will comply with the Habitats Directive.
11	Kilkenny	?		
12	Laois	?		
13	Leitrim	?		
14	Limerick (City & County)	?		
15	Longford		?	Preliminary work has now started on the Longford Town LAP which will include lands previously identified as part of the Northern and Southern Environs LAPs. It is likely that the Plan will be made in the third quarter of 2016. It will comply with the provisions of the Habitats Directive
16	Louth	?		
17	Mayo	?		
18	Meath	?		
19	Monaghan	?		
20	Offaly	?		
21	Roscommon	?		
22	Sligo	?		
23	South Dublin	?		
24	Tipperary	?		
25	Waterford	?		
26	Westmeath	?		
27	Wexford		?	Wexford Town and Environs Dev.Plan and Enniscorthy Town and Env. Plan. Both of these Plans do not have AA but have been reviewed by Consultants under the terms

				of the Department's Circular Letter and found to comply with the Habitats Directive. Review of both Plans due to commence in 2017.
28	Wicklow		2	Newtownmountkennedy LAP and Rathdrum LAP. Both not screened for AA. However, no development will be permitted on foot of these plans that would have a significant adverse impact on any Natura 2000 site or Natura network. Review of both Plans due to commence in 2017.

Plans can be accessed on the websites of the relevant planning authorities.

www.myplan.ie

Contact : Eoin Bennis Tel . 0035318882823

Email: Eoin.Bennis@environ.ie

4d) The Court further found that Ireland had failed to comply with Article 6 (3) and (4) in regard to aquaculture licensing.

This concerns management of fisheries and aquaculture activities in Natura 2000 sites in Ireland. The judgement resulted in restrictions on the aquaculture industry due to the inability of the State to issue licenses until the European Commission was satisfied that a rigorous system was in place to determine license applications, supported by comprehensive ecological data on each site.

A roadmap to compliance was agreed with the Commission in 2009, and the Department of Agriculture, Food and the Marine, as competent national authority for aquaculture and sea-fisheries licensing, working closely with the Marine Institute, BIM, and the Department of Arts, Heritage and the Gaeltacht, put in place a comprehensive new regulatory system to achieve full compliance with this part of the judgment.

A full progress update for aquaculture is provided in Appendix 5.

Contact: Aquaculture

Kevin.Hodnett@agriculture.gov.ie

Contacts: Data collection and appropriate assessments

Jeffrey.Fisher@Marine.ie

Fisheries

roni.hawe@agriculture.gov.ie

Sixth Complaint

6. Failure to transpose Article 10 of the Birds Directive (Obligation on the Minister to encourage Research)

Regulation 57, of the Birds and Natural Habitats Regulations, 2011 - notably paragraphs (c), (d) and (e), assign to the Minister the responsibilities that arise under Article 10 of the Birds Directive.

<http://www.irishstatutebook.ie/2011/en/si/0477.html>

Update of the programme

The Programme will be updated every six months (April and October) to reflect the measures undertaken.

APPENDIX 1

List of Sites classified 2002-2013

** shows sites where the SPA boundaries were extended to match or exceed the IBA boundary. The Colour coding legend is at the end of the Appendix

List of 2002 SPAs classified

Code	Site	County	Date of Classification
004137	DOVEGROVE CALLOWS SPA	OFFALY	27-Feb-02
004142	CREGANNA MARSH SPA	GALWAY	27-Feb-02
004096	MIDDLE SHANNON CALLOWS SPA **	GALWAY/OFFALY/ ROSCOMMON TIPPERARY WESTMEATH	22-Nov-02 C
Total	3		

List of 2004 SPA Sites classified

Code	Site	County	Date of Classification
004052	CARROWMORE LAKE SPA	MAYO	17-Nov-04
004072	STAGS OF BROADHAVEN SPA	MAYO	17-Nov-04
004074	ILLANMASTER SPA**	MAYO	17-Nov-04
004098	OWENDUFF/NEPHIN COMPLEX SPA**	MAYO	17-Nov-04 M GP
Total	4		

List of 2006 SPA Sites classified

Code	Site	County	Date of Classification
004084	INISHGLORA AND INISHKEERAGH SPA**	MAYO	13-Sep-06
004093	TERMONCARRAGH LAKE & ANNAGH MACHAIR SPA	MAYO	13-Sep-06 D C
004177	BILLS ROCKS SPA	MAYO	13-Sep-06
004082	GREER'S ISLAND SPA	DONEGAL	15-Nov-06
004057	LOUGH DERG SPA **	DONEGAL	15-Nov-06
004066	THE BULL & THE COW ROCKS SPA**	CORK	15-Nov-06
004002	SALTEES SPA **	WEXFORD	15-Nov-06
004003	PUFFIN SPA**	KERRY	15-Nov-06
004021	OLD HEAD OF KINSALE SPA**	CORK	15-Nov-06
004194	HORN HEAD TO FANAD HEAD SPA**	DONEGAL	22-Nov-06 CH P
004192	HELVICK HEAD TO BALLYQUINN SPA**	WATERFORD	22-Nov-06 CH P
004005	CLIFFS OF MOHER SPA **	CLARE	22-Nov-06 CH
004136	CLARE ISLAND SPA**	MAYO	22-Nov-06 CH
004150	WEST DONEGAL COAST SPA	DONEGAL	22-Nov-06 CH P
004153	DINGLE PENINSULA SPA**	KERRY	22-Nov-06 CH P
004154	IVERAGH PENINSULA SPA	KERRY	22-Nov-06 CH P
004155	BEARA PENINSULA SPA	CORK	22-Nov-06 CH
004156	SHEEPS HEAD TO TOE HEAD SPA	CORK	22-Nov-06 CH P

004187	SLIGO/LEITRIM UPLANDS SPA	LEITRIM/SLIGO	22-Nov-06 CH P
004189	KERRY HEAD SPA	KERRY	22-Nov-06 CH
004190	GALLEY HEAD TO DUNEEN POINT SPA	CORK	22-Nov-06 CH
004191	SEVEN HEADS SPA	CORK	22-Nov-06 CH
004193	MID-WATERFORD COAST SPA	WATERFORD	22-Nov-06 CH P
Total	23		

APPENDIX 1 (continued)

List of 2007 SPA Sites classified

Code	Site	County	Date of Classification
004007	SKELLIGS SPA**	KERRY	19-Feb-07
004134	LOUGH REA SPA**	GALWAY	19-Feb-07
004170	CRUAGH ISLAND SPA	KERRY	19-Feb-07
004160	SLIEVE BLOOM MOUNTAINS SPA	LAOIS/OFFALY	07-Nov-07 HH
004161	STACK'S TO MULLAGHAREIRK MOUNTAINS, WEST LIMERICK HILLS and MOUNT EAGLE SPA	CORK/KERRY /LIMERICK	07-Nov-07 HH
004162	MULLAGHANISH TO MUSHERAMORE MOUNTAINS SPA	CORK	07-Nov-07 HH
004165	SLIEVEFELIM TO SILVERMINES MOUNTAINS SPA	LIMERICK/ TIPPERARY	07-Nov-07 HH
004167	SLIEVE BEAGH SPA	MONAGHAN	07-Nov-07 HH
004168	SLIEVE AUGHTY MOUNTAINS SPA	CLARE/GALWAY	07-Nov-07 HH M
004076	WEXFORD HARBOUR and SLOBS SPA**	WEXFORD	21-Nov-07
004063	POULAPHOUCA RESERVOIR SPA**	WICKLOW	21-Nov-07
004009	LADYS ISLAND SPA**	WEXFORD	21-Nov-07
004020	BALLYTEIGUE BURROW SPA	WEXFORD	21-Nov-07
004186	THE MURROUGH SPA**	WICKLOW	21-Nov-07
004022	BALLYCOTTON BAY SPA **	CORK	05-Dec-07
004081	CLONAKILTY BAY SPA	CORK	05-Dec-07
00	LOUGH FERN**	DONEGAL	19-Dec-07
004008	BLASKETS SPA**	KERRY	19-Dec-07
004151	DONEGAL BAY SPA	DONEGAL	19-Dec-07
004175	DEENISH ISLAND and SCARIFF ISLAND SPA	KERRY	19-Dec-07
Total	20		

List of 2008 SPA Sites classified

Code	Site	County	Date of Classification
004107	COOLE/GARRYLAND**	GALWAY	23-Jan-08
004047	LOUGH OWEL SPA**	WESTMEATH	23-Jan-08
004046	LOUGH IRON SPA**	WESTMEATH	23-Jan-08
004068	INISHMURRAY	SLIGO	23-Jan-08
004095	KILCOLMAN BOG	CORK	30-Jan-08
004158	NANNY ESTUARY and SHORE SPA**	MEATH	30-Jan-08

004182	MID-CLARE COAST SPA	CLARE	30-Jan-08
004004	INISHKEA ISLANDS SPA**	MAYO	13-Feb-08 D
004024	SOUTH DUBLIN BAY AND RIVER TOLKA ESTUARY**	DUBLIN	28-May-08
004006	NORTH BULL ISLAND**	DUBLIN	28-May-08
004113	HOWTH HEAD COAST**	DUBLIN	28-May-08
004030	CORK HARBOUR	CORK	27-Aug-08
Total	12		

APPENDIX 1 (continued)

List of 2009 SPA Sites classified

Code	Site	County	Date of Classification
004100	INISHTRAHULL**	DONEGAL	4- March- 09
004115	INISHDUFF	DONEGAL	4- March- 09
004116	INISHKEEL	DONEGAL	4- March- 09
004120	RATHLIN O' BIRNE ISLAND	DONEGAL	4- March- 09
004121	ROANINISH**	DONEGAL	4- March- 09
004132	ILLANCRONE AND INISHKEERAGH **	DONEGAL	4- March- 09
004111	DUVILLAUN ISLANDS**	MAYO	18- March-09
004212	CROSS LOUGH (KILADOON)**	MAYO	18- March-09 T
004023	BALLYMACODA BAY **	CORK	18- March-09
004124	SOVEREIGN ISLANDS**	CORK	18- March-09
004135	ARDBOLINE AND HORSE ISLAND**	SLIGO	18- March-09
004118	KEERAGH ISLANDS**	WEXFORD	18- March-09
004041	BALLYALLIA LOUGH	CLARE	18- March-09
004114	ILLAUNONEARAUN	CLARE	18- March-09
004061	LOUGH KINALE AND DERRAGH LOUGH	LONGFORD CAVAN WESTMEATH	18- March-09
004045	GLEN LOUGH**	LONGFORD WESTMEATH	18- March-09
004119	LOOP HEAD	CLARE	26-August -09
004056	LOUGH CUTRA	GALWAY	26-August -09
004080	BOYNE ESTUARY	MEATH	26-August -09
004152	INISHMORE	GALWAY	26-August -09
004117	IRELAND'S EYE**	DUBLIN	8-November-09
004172	DALKEY ISLANDS**	DUBLIN	8-November-09
004069	LAMBAY ISLAND	DUBLIN	8-November-09
004122	SKERRIES ISLANDS**	DUBLIN	8-November-09
004015	ROGERSTOWN ESTUARY**	DUBLIN	8-November-09
004016	BALDOYLE BAY **	DUBLIN	8-November-09
004025	MALAHIDE ESTUARY (B/ SWORDS)**	DUBLIN	8-November-09
Total	27		

APPENDIX 1 (continued)

List of 2010 SPA Sites classified

Code	Site	County	Date of Classification
004033	BANNOW BAY**	WEXFORD	17 March 2010
004035	CUMMEEN STRAND	SLIGO	17 March 2010
004044	LOUGH ENNELL	WESTMEATH	17 March 2010
004065	LOUGH SHEELIN**	CAVAN,MEATH WESTMEATH	17 March 2010
004090	SHESKINMORE LOUGH	DONEGAL	17 March 2010
004032	DUNGARVAN HARBOUR **	WATERFORD	26 May 2010
004219	COURTMACSHERRY BAY	CORK	26 May 2010
004027	TRAMORE BACK STRAND	WATERFORD	26 May 2010
004129	BALLYSADARE BAY	SLIGO	26 May 2010
004043	LOUGH DERRAVARAGH**	WESTMEATH	26 May 2010
004092	TACUMSHIN LAKE	WEXFORD	26 May 2010
004228	LOUGH CONN / LOUGH CULLIN	MAYO	5 July 2010
004051	LOUGH CARRA **	MAYO	5 July 2010
004062	LOUGH MASK**	MAYO /GAL	5 July 2010
004145	DURNESH LOUGH	DONEGAL	5 July 2010
004221	ILLAUNNANOON	GALWAY	5 July 2010
004086	RIVER LITTLE BROSNA CALLOWS	OFFALY/ TIPP	5 July 2010
004028	BLACKWATER ESTUARY**	CORK/WATERF	4 August 2010
004050	LOUGH ARROW**	SLIGO/	4 August 2010
004139	LOUGH CROAN TURLOUGH	ROSCOMMON	4 August 2010
004029	CASTLEMAINE HARBOUR**	KERRY	4 August 2010
004084	LOUGH GARA	ROSC/SLIGO	4 August 2010
004143	CAHORE MARSHES	WEXFORD	4 August 2010
004140	FOUR ROADS TURLOUGH	ROSCOMMON	4 August 2010
004034	TRAWBREAQA BAY **	DONEGAL	4 August 2010
004110	LOUGH NILLAN BOG	DONEGAL	4 August 2010 M GP D
004031	INNER GALWAY BAY **	GALWAY/ CLARE	22 September 2010
004089	RAHASANE TURLOUGH**	GALWAY	22 September 2010
004144	HIGH IS, INISHARK, DAVILAUN**	GALWAY	22 September 2010
004220	COROFIN WETLANDS	CLARE	22 September 2010
004036	KILLALA BAY/MOY ESTUARY	MAYO/SLIGO	22 September 2010
004075	LOUGH SWILLY	DONEGAL	22 September 2010
004097	RIVER SUCK CALLOWS	GALWAY/ROSC	22 September 2010
004026	DUNDALK BAY **	LOUTH	22 September 2010
004091	STABANNAN- BRAGANSTOWN	LOUTH	22 September 2010
004019	THE RAVEN**	WEXFORD	22 September 2010
004040	WICKLOW MOUNTAINS	WICKLOW/ DUBLIN	15 December 2010 M P
004094	BLACKWATER CALLOWS	CORK / WATERFORD	15 December 2010
004039	DERRYVEAGH AND GLENDOWAN MOUNTAINS **	DONEGAL	15 December 2010 M RTD GP D P
004049	LOUGH OUGHTER COMPLEX**	CAVAN	15 December 2010
004087	LOUGH FOYLE SPA	DONEGAL	15 December 2010
Total	41		

APPENDIX 1 (continued)

List of 2011 SPA Sites classified

Code	Site	County	Date of Classification
004233	RIVER NORE	LAOIS/ KILKENNY	8-June- 2011 K
004232	RIVER BOYNE AND BLACKWATER	CAVAN, LOUTH, MEATH, WESTMEATH	8-June- 2011 K
004077	RIVER SHANNON AND RIVER FERGUS ESTUARIES SPA **	CLARE/ KERRY/ LIMERICK	8-June- 2011
004181	CONNEMARA BOG COMPLEX **	GALWAY	22-June-2011 M GP
004037	BLACKSOD BAY / BROADHAVEN	MAYO	22-June-2011 D GP
004231	INISHBOFIN, OMEY, TURBOT ISLANDS**	GALWAY	6-July-2011 C
004149	FALCARRAGH TO MEENLARAGH	DONEGAL	6-July-2011 C
004073	TORY ISLAND	DONEGAL	6-July-2011 C
004083	INISHBOFIN, INISHDOOEY, INISHBEG	DONEGAL	6-July-2011 C
004146	MALIN HEAD	DONEGAL	6-July-2011 C
004230	WEST DONEGAL ISLANDS **	DONEGAL	6-July-2011 C
004148	FANAD HEAD	DONEGAL	6-July-2011 C
004227	MULLET PENINSULA	MAYO	6-July-2011 C
004064	LOUGH REE	LONGFORD / WESTMEATH/ ROSCOMMON	27-July-2011
004058	LOUGH DERG (SHANNON)	CLARE/TIPPERARY/ GALWAY	27-July-2011
004234	BALLINTEMPLE AND BALLYGILGAN	SLIGO	27-July-2011
004013	DRUMCLIFF BAY	SLIGO	27-July-2011
004014	ROCKABILL	DUBLIN	17- Aug-2011
004125	MAGHAREE ISLANDS	KERRY	17- Aug-2011
004153	DINGLE PENINSULA EXTENSION ***	KERRY	17- Aug-2011
004188	TRALEE BAY COMPLEX	KERRY	17- Aug-2011
004123	SLYNE HEAD TO ARDMORE POINT ISLANDS	GALWAY	26-Oct-2011
004042	LOUGH CORRIB	GALWAY	26-Oct-2011
004078	CARLINGFORD LOUGH	LOUTH	23-Nov 2011
Total	23		Overall Total 153

*Not to be counted as an additional site – it is an extension of the current Dingle Peninsula

List of 2013 SPA Sites classified

004037	BLACKSOD BAY / BROADHAVEN*	MAYO	3-June-2013 D
004235	DOOGORT MACHAIR	MAYO	27 -July-2013 D
Total	2		Overall Total 154

* Not to be counted as an additional site – it is an extension of the current Blacksod/ Broadhaven SPA

COLOUR CODED KEY - IDENTIFYING 42 SPA SITES FOR THE PROTECTION OF SPECIFIC SPECIES MENTIONED IN THE BIRDS CASE JUDGMENT

D	Dunlin Site	CH	Chough Site
C	Corncrake Site	HH	Hen Harrier Site
M	Merlin Site	GP	Golden Plover Site
K	Kingfisher Site	T	Tern Site
RTD	Red-Throated Diver Site	P	Peregrine Site

APPENDIX 2 STATUTORY INSTRUMENTS

Site Code	Name	Date of Signature	S.I. Number
800004052	CARROWMORE LAKE	10-Nov-05	S.I. 713/2005
800004072	STAGS OF BROADHAVEN**	10-Nov-05	S.I. 716/2005
800004074	ILLANMASTER	10-Nov-05	S.I. 714/2005
800004098	OWENDUFF/NEPHIN COMPLEX M GP**	10-Nov-05	S.I. 715/2005
800004084	INISHGLORA AND INISHKEERAGH **	5-Feb-2007	S.I. 047/2007
800004093	TERMONCARRAGH LAKE & ANNAGH MACHAIR SPA C D	5-Feb-2007	S.I. 046/2007
800004177	BILLS ROCKS SPA	5-Feb-2007	S.I. 048/2007
800004022	BALLYCOTTON BAY**	19-Feb-2010	S.I. 59/2010
800004041	BALLYALLIA LOUGH	19-Feb-2010	S.I.58/2010
800004060	LOUGH FERN**	19-Feb-2010	S.I. 70/2010
800004063	POULAPHOUCA RESERVOIR**	19-Feb-2010	S.I. 73/2010
800004066	THE BULL AND THE COW ROCKS**	19-Feb-2010	S.I. 76/2010
800004134	LOUGH REA **	19-Feb-2010	S.I. 72/2010
800004045	GLEN LOUGH **	19-Feb-2010	S.I. 65/2010
800004114	ILLAUNONEARAUN	19-Feb-2010	S.I.67/2010
800004118	KEERAGH ISLANDS**	19-Feb-2010	S.I.68/2010
800004132	ILLANCRONE AND INISHKEERAGH **	19-Feb-2010	S.I. 66/2010
800004047	LOUGH OWEL **	19-Feb-2010	S.I. 71/2010
800004135	ARDBOLINE ISLAND AND HORSE ISLAND **	19-Feb-2010	S.I. 57/2010
800004170	CRUAGH ISLAND	19-Feb-2010	S.I. 62/2010
800004175	DEENISH ISLAND AND SCARIFF ISLAND	19-Feb-2010	S.I. 63/2010
800004187	SLIGO/LEITRIM UPLANDS CH P	19-Feb-2010	S.I. 75/2010
800004212	CROSS LOUGH (KILLADOON) T **	19-Feb-2010	S.I. 61/2010
800004009	LADY'S ISLAND LAKE**	19-Feb-2010	S.I. 69/2010
800004081	CLONAKILTY BAY	19-Feb-2010	S.I. 60/2010
800004111	DUVILLAUN ISLANDS**	19-Feb-2010	S.I. 64/2010

Appendix 2 - continued			
Site Code	Name	Date of Signature	S.I. Number
800004007	SKELLIGS **	19-Feb-2010	S.I. 74/2010
800004003	PUFFIN ISLAND**	12-Mar-2010	S.I. 111/2010
800004021	OLD HEAD OF KINSALE **	12-Mar-2010	S.I.110/2010
800004082	GREERS ISLE	12-Mar-2010	S.I.105/2010
800004061	LOUGH KINALE AND DERRAGH LOUGH	12-Mar-2010	S.I. 108/2010
800004100	INISHTRAHULL **	12-Mar-2010	S.I. 107/2010
800004115	INISHDUFF	12-Mar-2010	S.I. 106/2010
800004120	RATHLIN O'BIRNE ISLAND	12-Mar-2010	S.I. 112/2010
800004121	ROANINISH **	12-Mar-2010	S.I. 113/ 2010
800004124	SOVEREIGN ISLANDS**	12-Mar-2010	S.I. 114/2010
800004182	MID CLARE COAST	12-Mar-2010	S.I. 109/2010
800004024	SOUTH DUBLIN BAY AND RIVER TOLKA ESTUARY **	11-May-2010	S.I. 211/2010
800004006	NORTH BULL ISLAND **	11-May-2010	S.I. 212 /2010
800004030	CORK HARBOUR	26 May 2010	S.I. 237 / 2010
800004107	COOLE-GARRYLAND**	26 May 2010	S.I. 236 /2010
800004056	LOUGH CUTRA	26 May 2010	S.I. 243 / 2010
800004069	LAMBAY ISLAND	26 May 2010	S.I. 242 /2010
800004117	IRELAND'S EYE**	26 May 2010	S.I. 240 / 2010
800004122	SKERRIES ISLANDS**	26 May 2010	S.I. 245 /2010
800004172	DALKEY ISLANDS**	26 May 2010	S.I. 238 / 2010
800004057	LOUGH DERG (DONEGAL)**	26 May 2010	S.I. 244 / 2010
800004116	INISHKEEL	26 May 2010	S.I. 239 /2010
800004154	IVERAGH PENINSULA CH P	26 May 2010	S.I. 241 / 2010
800004192	HELVICK HEAD TO BALLYQUIN CH P **	4 June 2010	S.I. 277/ 2010
800004002	SALTEE ISLANDS**	4 June 2010	S.I. 274 / 2010
800004005	CLIFFS OF MOHER CH **	4 June 2010	S.I. 269 / 2010
800004046	LOUGH IRON**	4 June 2010	S.I. 270 / 2010
800004136	CLARE ISLAND CH **	4 June 2010	S.I. 273 /2010
800004015	ROGERSTOWN ESTUARY**	4 June 2010	S.I. 271 /2010

800004016	BALDOYLE BAY**	4 June 2010	S.I. 275 /2010
800004008	BLASKET ISLANDS**	4 June 2010	S.I. 272 / 2010
800004190	GALLEY HEAD TO DUNEEN POINT CH	4 June 2010	S.I. 276 / 2010
800004191	SEVEN HEADS CH	4 June 2010	S.I. 268 / 2010
800004150	WEST DONEGAL COAST CH P	30 July 2010	S.I. 389 / 2010
800004090	SHESKINMORE LOUGH	30 July 2010	S.I. 388 /2010
800004156	SHEEP'S HEAD TO TOE HEAD CH P	30 July 2010	S.I. 387 /2010
800004095	KILCOLMAN BOG	30 July 2010	S.I. 386 /2010

Appendix 2 - continued			
Site Code	Name	Date of Signature	S.I. Number
800004189	KERRY HEAD CH	30 July 2010	S.I. 385 / 2010
800004137	DOVEGROVE CALLOWS	30 July 2010	S.I. 384 / 2010
800004020	BALLYTEIGUE BURROW	30 July 2010	S.I. 383 / 2010
800004048	LOUGH GARA	16 June 2011	S.I. 288/2011
800004050	LOUGH ARROW **	16 June 2011	S.I. 289/2011
800004065	LOUGH SHEELIN**	16 June 2011	S.I. 290/2011
800004139	LOUGH CROAN TURLOUGH	16 June 2011	S.I. 292/2011
800004143	CAHORE MARSHES	16 June 2011	S.I. 293/2011
800004219	COURTMACSHERRY BAY	16 June 2011	S.I. 296/2011
800004221	ILLAUNNANOON	16 June 2011	S.I. 297/2011
800004145	DURNESH LOUGH	16 June 2011	S.I. 294/2011
800004027	TRAMORE BACK STRAND	16 June 2011	S.I. 286/2011
800004043	LOUGH DERRAVARAGH**	16 June 2011	S.I. 287/2011
800004129	BALLYSADARE BAY	16 June 2011	S.I. 291/2011
800004186	THE MURROUGH**	16 June 2011	S.I. 298/2011
800004025	MALAHIDE ESTUARY **	16 June 2011	S.I. 285/2011
800004151	DONEGAL BAY	16 June 2011	S.I. 295/2011

800004051	LOUGH CARRA SPA**	30 June 2011	S.I.340/2011
800004087	LOUGH FOYLE SPA	30 June 2011	S.I.341/2011
800004035	CUMMEEN STRAND SPA	12 July 2011	S.I.376/2011
800004036	KILLALA BAY / MOY ESTUARY	11 October 2011	S.I.522/2011
800004068	INISHMURRAY	14 October 2011	S.I.534/2011
800004019	THE RAVEN**	14 October 2011	S.I. 533/2011
800004091	STABANNAN-BRAGANSTOWN	26 October 2011	S.I.546/2011
800004193	MID-WATERFORD COAST CH P	28 October 2011	S.I. 558 /2011
800004165	SLIEVE FEILIM TO SILVERMINES MTS HH	15- Nov-2011	S.I. 587/2011
800004004	INISHKEA ISLANDS SPA D **	15- Nov-2011	S.I.588/2011

Site Code	Appendix 2 - continued		S.I. Number
	Name	Date of Signature	
800004140	FOUR ROADS TURLOUGH	15- Nov-2011	S.I. 589/2011
800004228	LOUGH CONN AND LOUGH CULLIN	15- Nov-2011	S.I. 590/2011
800004119	LOOP HEAD SPA	15- Nov-2011	S.I. 591/2011
800004033	BANNOW BAY**	15- Nov-2011	S.I. 592/2011
800004167	SLIEVE BEAGH HH	29- Nov-2011	S.I. 617/2011
800004044	LOUGH ENNELL	29- Nov-2011	S.I.618/2011
800004080	BOYNE ESTUARY	5-Dec-2011	S.I. 626/2011
800004162	MULLAGANISH TO MUSERAMORE MTS HH	5- Dec -2011	S.I. 627/2011
800004110	LOUGH NILLAN BOG SPA M D GP	7- Dec-2011	S.I. 633/2011
800004086	RIVER LITTLE BROSNA CALLOWS (100)	15- Dec-2011	S.I. 652/2011
800004013	DRUMCLIFF BAY	9-Feb-2012	S.I. 40/2012
800004096	MIDDLE SHANNON CALLOWS C **	9-Feb-2012	S.I. 41/2012
800004168	SLIEVE AUGHTY MTS HH M	21-Mar-2012	S.I.83/2012
80004062	LOUGH MASK **	21-Mar-2012	S.I.84/2012
80004014	ROCKABILL	21-Mar-2012	S.I. 94/2012
800004220	COROFIN WETLANDS	28-Mar-2012	S.I. 117 /2012
800004158	RIVER NANNY ESTUARY AND SHORE **	26- Apr-2012	S.I.140/2012
800004125	MAGHAREE ISLANDS	26-Apr-2012	S.I.139/2012
800004076	WEXFORD HARBOUR & SLOBS**	16-May-2012	S.I. 194/2012
800004094	BLACKWATER CALLOWS	16-May-2012	S.I. 191/2012
800004144	HIGH ISLAND, INISHARK AND DAVILAUN**	16-May-2012	S.I.192/2012
800004233	RIVER NORE K	16-May-2012	S.I.193/2012
800004160	SLIEVE BLOOM MTS HH	29- May-2012	S.I.184/2012
800004092	TACUMSHIN LAKE SPA	29- May-2012	S.I.178/2012
800004159	SLYNE HEAD TO ARDMORE POINT ISLANDS SPA	29- May-2012	S.I. 177/2012
800004113	HOWTH HEAD COAST **	29- May-2012	S.I. 185/2012
800004029	CASTLEMAINE HARBOUR**	3-Jul-2012	S.I. 244/2012
800004034	TRAWBREAGA BAY**	4-Jul-2012	S.I. 261/2012
800004026	DUNDALK BAY **	3-Aug-2012	S.I. 310/2012

800004089	RAHASANE TURLOUGH**	4-Aug-2012	S.I. 311/2012
800004097	RIVER SUCK CALLOWS	2- Oct-2012	S.I. 397/2012
800004075	LOUGH SWILLY	22- Oct-2012	S.I. 592/2012

Site Code	Appendix 2 - continued Name	Date of Signature	S.I. Number
800004042	LOUGH CORRIB	22-Oct-2012	S.I. 455/2012
800004064	LOUGH REE	13-Nov-2012	S.I. 456/2012
800004028	BLACKWATER ESTUARY **	13-Nov-2012	S.I. 590/2012
800004078	CARLINGFORD LOUGH	22-Nov-2012	S.I. 464/2012
800004232	RIVER BOYNE & RIVER BLACKWATER K	21-Nov-2012	S.I. 462/2012
800004234	BALLINTEMPLE & BALLYGILGAN	21-Nov-2012	S.I. 463/2012
800004153	DINGLE PENINSULA CH P **	23-Nov-2012	S.I. 480/2012
800004161	STACK'S TO MULLAGHAREIRK MOUNTAINS, WEST LIMERICK HILLS AND MOUNT EAGLE HH	23-Nov-2012	S.I. 591/2012
800004049	LOUGH OUGHTER COMPLEX **	20-Dec-2012	S.I. 585/2012
800004040	WICKLOW MOUNTAINS M P	20-Dec-2012	S.I. 586/2012
800004155	BEARA PENINSULA CH	20-Dec-2012	S.I. 587/2012
800004227	MULLET PENINSULA C	25-Feb-13	S.I. 83/2013
800004146	MALIN HEAD C	25-Feb-13	S.I. 84/2013
800004194	HORN HEAD TO FANAD HEAD CH P **	23-Jul-13	S.I. 281/2013
800004023	BALLYMACODA BAY	28-Aug-13	S.I. 338/13
800004148	FANAD HEAD C	19-Nov-13	S.I. 439/13
800004073	TORY ISLAND C	17-Dec-2013	S.I. 585/13
800004188	TRALEE BAY COMPLEX	18-Apr-2019	S.I. 175/19
800004235	DOOGORT MACHAIR D	21-Apr-2019	S.I. 176/2019
800004231	INISHBOFIN, OMEY ISLAND AND TURBOT ISLAND C **	20-Apr-2019	S.I. 177/2019
800004152	INISHMORE	19-Apr-2019	S.I. 178/2019
	Signed S.I.s 143		25 April 2019

SPA Sites Pending Signature

Site Code	Name	Date of Signature	S.I. Number
800004032	DUNGARVAN HARBOUR**	With Minister	
800004058	LOUGH DERG	With Minister	
800004142	CREGGANNA MARSH	July 2019	
800004077	RIVER SHANNON AND RIVER FERGUS ESTUARIES**	With Minister	
800004031	INNER GALWAY BAY**	July 2019	
800004181	CONNEMARA BOG COMPLEX SPA	drafting	
800004039	DERRYVEAGH AND GLENDOWAN MOUNTAINS SPA	drafting	

COLOUR CODED KEY - IDENTIFYING 42 SPA SITES FOR THE PROTECTION OF SPECIFIC SPECIES MENTIONED IN THE BIRDS CASE JUDGMENT

D	Dunlin Site	CH	Chough Site
C	Corncrake Site	HH	Hen Harrier Site
M	Merlin Site	GP	Golden Plover Site
K	Kingfisher Site	T	Tern Site
RTD	Red-Throated Diver Site	P	Peregrine Site

Appendix 2 – continued Proposed extensions to existing SPAs sites

Site Code	Name		
800004037	BLACKSOD BAY/BROADHAVEN	Marine extension	

SPA Sites under Appeal

Site Code	Name
800004230	WEST DONEGAL ISLANDS C**
800004083	INISHBOFIN, INISHDOOEY AND INISHBEG C
800004149	FALCARRAGH TO MEENLARAGH C

APPENDIX 3

RINGABELLA ESTUARY, CO CORK
and its potential inclusion into the SPA Network



August 2014

Contents

1. 1.0.....	BACKGROUND	
.....		48
2. 2.0.....	RINGABELLA ESTUARY CO CORK	
.....		49
2.1	Ecological description of site	49
2.2	Waterbirds of Ringabella Estuary	49
3. 3.0.....	TOLKA ESTUARY, SOUTH DUBLIN BAY	
.....		53
3.1	Ecological description of the site	53
3.2	Waterbird species associated with the Tolka Estuary	53
3.3	Waterbird species associated with the inner Tolka Estuary	54
4. 4.0.....	COMPENSATORY HABITAT – FULFILLMENT OF REQUIREMENTS	
.....		57
5. 5.0.....	LINK WITH CORK HARBOUR SPA	
.....		59
6. 6.0.....	REFERENCES	
.....		60
7. ANNEX 1 – BOUNDARY MAPPING		61

1.0 BACKGROUND

In response to the judgment of the Court of Justice of the European Communities (Case C-418/04) Ireland has agreed to identify and include a suitable area of coastal wetland into Ireland's Special Protection Area (SPA) Network as compensation for an area of intertidal habitat (circa of 2.2ha) of the inner Tolka Estuary, Co Dublin. This area ought to have been included in the South Dublin Bay and River Tolka Estuary SPA but was subject to in-filling as part of the Dublin Port Tunnel works.

The broad criteria that was agreed to identify a suitable compensatory site were:

1. it must contain at least 2.2 ha of suitable habitat (i.e. intertidal mudflat);
2. it should be able to support a similar waterbird assemblage as the area that was in-filled;
3. the site boundaries are to be defined on an ecological basis;
4. for the purposes of on-going appropriate protection and management the area in question should be incorporated into an existing SPA designated for wintering waterbirds; and
5. ideally the compensatory area is to be located as close as practicable to the area where the habitat was lost.

After an investigation of Dublin Bay and the series of wetland sites immediately to the north and south no suitable areas were identified. This was due to the fact that all suitable habitats in these areas were already included in the SPA network. After further investigation, Ringabella Estuary in Co Cork was identified as a strong candidate and this document outlines its suitability and the consequences should it be successfully designated.

2.0 RINGABELLA ESTUARY CO CORK

2.1 Ecological description of site

Ringabella Estuary (Grid reference W 771 569) is a narrow north-east facing estuary, 3km south of Roches Point at the mouth of Cork Harbour.

The estuary receives the waters of the Minane River which flows through the village of Minane Bridge to the east. The inner estuary is modified with a tidal barrage and sea wall built for flood defence in the mid 1900's; the land upstream of the barrage is polderland comprising wet grassland, wet woodland (e.g. Willow) and scrub. Below the barrage the estuary comprises mudflats but the sediment become progressively sandier along the estuarine gradient towards the mouth. A sand spit (bar) extends across half of the width of the estuary in the outer reaches adding to the sheltered nature of the site. Saltmarsh is present in several places including on the spit, but is most dominant in the inner reaches where *Spartina* sp occurs. Exposed bedrock (reef) habitat supporting Egg Wrack (*Ascophyllum nodosum*) occurs along the southern outer shore.



Inner estuary mudflats

The outer southern shoreline is bounded by tree-lined cliffs while the inner/mid estuary is largely bordered by sea walls and treelines and backed by agricultural grassland. The inner estuary is particularly well sheltered and secluded with access only possible through private agricultural land.

A small beach at Fountainstown in the outer estuary allows access to the site by recreational users; walking and dog exercising being popular. However the largely inaccessible and uninhabited nature of the inner and mid estuary leads to this site being generally secluded and disturbance-free.

2.2 Waterbirds of Ringabella Estuary

Ringabella Estuary (Ringabella Creek) has been counted as part of the Irish Wetland Bird Survey (I-WeBS) since the season 1997/98. A total of 44 waterbird species have been recorded at the site including 15 waterfowl (and allies), 19 waders, seven gulls and three others. During the 15-year count period (1997/98 – 2011/12) the site has regularly supported numbers of Black-tailed Godwit that have exceeded the all-Ireland threshold. The wader species that have occurred in greatest numbers (peak annual maxima in brackets) are Lapwing (317), Dunlin (253), Black-tailed Godwit (430), Curlew (269), and Redshank (125).

Ringabella Estuary was counted as part of the 2010/11 Waterbird Survey programme of Cork Harbour. The estuary was divided into two count subsites; the inner subsite covering the area from the inner estuary sea wall east as far as the sand spit; and the outer subsite covering the outer estuary from the sand spit to the proposed seaward extent of the site. The total count area was 122 ha.

A total of 22 waterbird species were recorded (Table 1) including nine wader species. Numbers of Black-tailed Godwit that exceeded the all-Ireland threshold were recorded in the inner estuary subsite during two low tide surveys (Table 1). Agricultural fields to the north of the estuary (counted separately to the estuary) were notable for regularly holding flocks of foraging Black-tailed Godwits and Lapwings; peak numbers recorded were 86 and 179 individuals respectively.

Table 1. Ringabella Estuary – data from the 2010/11 Waterbird Survey Programme of Cork Harbour (grey shading represents numbers of all-Ireland importance*)

Subsite	Species	Low Tide Count #1	Low Tide Count #2	Low Tide Count #3	Low Tide Count #4	High Tide Count
Ringabella Inner Creek	Black-headed Gull	20	75	6	130	17
Ringabella Inner Creek	Black-tailed Godwit	157	359	21	126	25
Ringabella Inner Creek	Cormorant	3	1	6		2
Ringabella Inner Creek	Common Gull	12	31	11	21	4
Ringabella Inner Creek	Curlew	19	61	5	78	11
Ringabella Inner Creek	Dunlin	33	42	18		
Ringabella Inner Creek	Little Egret	1	1	2		
Ringabella Inner Creek	Great Black-backed Gull	16	5	4	13	
Ringabella Inner Creek	Greenshank	6	7	5	3	3
Ringabella Inner Creek	Grey Heron	3	3	5		1
Ringabella Inner Creek	Herring Gull	1	1	1	2	
Ringabella Inner Creek	Lapwing		116	7		307
Ringabella Inner Creek	Lesser Black-backed Gull	125	67	4	17	
Ringabella Inner Creek	Oystercatcher	2	4	6	7	6
Ringabella Inner Creek	Redshank	83	90	77	31	5
Ringabella Inner Creek	Ringed Plover			2	6	
Ringabella Inner Creek	Shelduck			7	68	27
Ringabella Inner Creek	Teal	6	149	130	59	2
Ringabella Inner Creek	Sandwich Tern	1				
Ringabella Inner Creek	Turnstone				2	1
Ringabella Inner Creek	Wigeon		9	41	61	29
Ringabella Outer creek	Black-headed Gull	14	10	19		4
Ringabella Outer creek	Cormorant		1			
Ringabella Outer creek	Common Gull	25	17	5	15	1
Ringabella Outer creek	Curlew	2	2		1	7
Ringabella Outer creek	Little Egret	1				
Ringabella Outer creek	Great Black-backed Gull	1			2	

Ringabella Outer creek	Greenshank	3	1	2	1	1
Ringabella Outer creek	Grey Heron	3				
Ringabella Outer creek	Herring Gull	10	1	2		
Ringabella Outer creek	Lesser Black-backed Gull		3			
Ringabella Outer creek	Mallard					20
Ringabella Outer creek	Oystercatcher	20	12	13	11	1
Ringabella Outer creek	Redshank	1	3	3	1	2
Ringabella Outer creek	Sandwich Tern	2				

* numbers of all-Ireland importance follow thresholds in Crowe & Holt (2013).

3.0 TOLKA ESTUARY, SOUTH DUBLIN BAY

3.1 Ecological description of the site

The Tolka Estuary is situated to the north of the River Liffey in Dublin Bay and is part of the South Dublin Bay and River Tolka Estuary SPA (Site Code 4024).

The estuary is relatively shallow with extensive mud/sand flats and extends over an area of 3.58km². The vast majority of riverbank, shoreline and channel in the estuary has been modified and manipulated over time to allow for urban development (e.g. channelisation of the river, building of retaining walls, Dublin Port Company). Sediments vary from soft muds with a high organic content in the inner estuary to exposed, well-aerated sands off the Bull Wall (NPWS, 2012). The benthic community was classified (by data extrapolation) as 'fine sand to sandy mud with *Pygospio elegans* and *Crangon crangon*' by NPWS (2013), a community that occurs in the 'muddier' sections of Dublin Bay, including the mudflats on the landward side of Bull Island.

3.2 Waterbird species associated with the Tolka Estuary

The Tolka Estuary was counted as part of the 2011/12 Waterbird Survey Programme of Dublin Bay. The estuary as a whole encompasses intertidal and subtidal estuarine habitats extending from the inner estuary eastwards to the Bull Wall; a total count area of 405 ha. The estuary was subdivided into five subsites, of which the inner subsite (OUL43) extends into the inner estuary as far as a bridge. The area upstream of the bridge, that once contained the 2.2ha of intertidal mudflat which is now in-filled, was not counted. Summary data for the Tolka Estuary are provided in Table 2. A total of 27 waterbird species were counted across the estuary as a whole.

The Tolka Estuary count area described above is comparable with an area surveyed in the 2012/13 season by Nairn (2013) for Dublin Port Company.

Whole estuary low tide counts during the 2011/12 season (NPWS) yielded total counts ranging from 1,994 to 5,659 waterbirds, while Nairn (2013) recorded whole site counts ranging from 2,601 to 7,929 waterbirds. An additional count in March 2013 recorded a total of 15,563 waterbirds which was dominated by 8,573 Black-headed Gulls (Nairn, 2013). Table 2 shows summary data for the Tolka Estuary from the 2011/12 season (NPWS) and peak counts recorded by Nairn (2013). Five species occur regularly in numbers exceeding the threshold of all-Ireland importance.

Table 2. Tolka Estuary – low tide data from the 2011/12 Waterbird Survey Programme of Dublin Bay (peak low tide count in bold; light grey shading represents numbers of all-Ireland importance) plus peak counts from Nairn, 2013.

Species	Low Tide Count #1	Low Tide Count #2	Low Tide Count #3	Low Tide Count #4	Peak 2012/13 (Nairn, 2013)
Mute Swan	1	2			2
Light-bellied Brent Goose		349	80	230	270
Shelduck			9	15	20
Wigeon			11	36	26
Teal			2		0
Goldeneye				3	6
Red-breasted Merganser	13	34	17	43	21
Great Northern Diver		1			0
Little Grebe			3	1	0
Great Crested Grebe	5	28	6	2	16
Cormorant	16	12	4	10	7
Grey Heron	15	17	7	7	9
Oystercatcher	305	243	245	229	286
Grey Plover	38	7	10	143	51
Knot		14	1750	1135	3680
Sanderling				3	29
Dunlin	1	82	817	773	2299
Black-tailed Godwit	16	38	38	239	159
Bar-tailed Godwit	48	156	105	759	1664
Curlew	225	169	129	250	461
Redshank	203	237	94	207	559
Turnstone	38	53	39	45	54
Black-headed Gull	700	378	444	1213	8573
Common Gull	4	24	9	109	81
Lesser Black-backed Gull		1			28
Herring Gull	363	200	211	198	530
Great Black-backed Gull	3	8	12	9	9
TOTAL	1994	2053	4042	5659	

3.3 Waterbird species associated with the inner Tolka Estuary

While the Tolka Estuary supports a large number of waterbirds, not all of these birds will distribute across the whole area.

The inner Tolka Estuary is likely to follow the general patterns of any estuary receiving a main river channel, in that the inner sections will be characterised by 'muddier' sediment and the marine infauna are likely to be restricted to those species capable of tolerating the widely fluctuating salinity levels. Marine biotopes⁴/communities are likely to include *Hediste diversicolor* and oligochaetes in littoral mud (LS.LMu.UEst.Hed.ol) and Polychaete/oligochaete dominated upper estuarine mud shores (LS.LMu.UEst) which are species-poor biotopes found typically in low salinity conditions at the head of estuaries. Waterbird species that occur in association with inner estuarine benthic communities tend to include wading birds e.g. Black-tailed Godwit, Redshank, Curlew and Dunlin, although this latter species has a site-specific distribution and does not always follow this pattern. Some waterfowl species including Wigeon, Teal and Mallard can often be attracted to inner estuary freshwater flows (Ravenscroft & Beardall, 2003).

Data from the 2011/12 Waterbird Survey Programme of Dublin Bay for the inner Tolka Estuary (subsite 0UL43) show Black-tailed Godwit, Redshank and Curlew to be among the most numerous wading birds within the inner estuary, along with Bar-tailed Godwit (Table 3), although the latter species does not tend to be recorded in the extreme inner reaches. Dunlin have occurred in good numbers within subsite 0UL43 on occasion but Nairn (2013) suggests they prefer the mid to outer estuary. Oystercatchers are widely distributed across the whole estuary but between 1% and 16% of the total numbers can occur within the inner estuary subsite.⁵ Turnstones are likely to occur on a regular basis. Good numbers of Light-bellied Brent Goose are also recorded in the inner estuary (peak count 230, 2011/12). Waterfowl species are not recorded very often and in low numbers only within the wider Tolka Estuary. Gull species, and particularly Black-headed Gulls occur in good numbers in the inner estuary.

From these data it can be conjectured that the aforementioned waterbird community, namely Black-tailed Godwit, Redshank, Curlew, Oystercatcher and Turnstone as well as various gull species may well have utilised the mudflat area that was subject to the infilling. Light-bellied Brent Goose may have used the area as part of a much wider intertidal and terrestrial distribution, if suitable resources e.g. macroalgae were present.

⁴ A biotope is defined as the physical habitat together with its characteristic community of plants and/or animals. Marine habitats are assessed and mapped using the Marine Biotope Classification (Connor *et al.*, 2004).

⁵ Calculated based on numbers recorded in subsite 0UL43 compared to numbers across Tolka Estuary as a whole using data from the 2011/12 Waterbird Survey Programme.

Table 3. Tolka Estuary – inner estuary subsite OUL43 - low tide data from the 2011/12 Waterbird Survey Programme of Dublin Bay

Species	Low Tide Count #1	Low Tide Count #2	Low Tide Count #3	Low Tide Count #4
Mute Swan	1	1		
Light-bellied Brent Goose		211	60	230
Red-breasted Merganser		1	2	5
Great Crested Grebe		9		
Cormorant	1	4	3	
Grey Heron	10	8	2	3
Oystercatcher	37	21	26	25
Grey Plover				3
Dunlin	1	82	7	
Black-tailed Godwit	10	28		174
Bar-tailed Godwit	1	30	52	142
Curlew	97	37	45	43
Redshank	112	161	50	78
Turnstone	3	3	4	11
Black-headed Gull	631	323	285	466
Common Gull		2	1	6
Lesser Black-backed Gull		1		
Herring Gull	186	71	88	67
Greater Black-backed Gull		1	8	9

4.0 COMPENSATORY HABITAT – FULFILLMENT OF REQUIREMENTS

Does the habitat and species composition of Ringabella Estuary adequately compensate for the loss of 2.2ha in Tolka Estuary?

As concluded above, the waterbirds species that utilise the inner Tolka Estuary and potentially utilised the 2.2ha area subject to infilling are Black-tailed Godwit, Redshank, Curlew, Oystercatcher, Turnstone, gull species (particularly Black-headed Gulls) with some potential although likely irregular use by Light-bellied Brent Goose and Bar-tailed Godwit.

Therefore compensatory habitat should aim to fulfil habitat requirements (foraging and roosting) for Black-tailed Godwit, Redshank, Curlew, Oystercatcher, Turnstone and gull species, particularly Black-headed Gulls.

The habitat requirements i.e. mudflats and benthic communities associated with mudflats, are fulfilled at Ringabella Estuary. As described in Section 2.1, wader species that have occurred in greatest numbers at Ringabella Estuary are Lapwing, Dunlin, Black-tailed Godwit, Curlew, and Redshank, with numbers of Black-tailed Godwit regularly exceeding the all-Ireland threshold. Oystercatchers occur in relatively low numbers (peak number of 64 (1997/98 – 2010/11, I-WeBS); low tide peak count of 22 (2010/11, NPWS)), but these numbers are comparable with those that utilise the inner Tolka Estuary.



wide expanse of mudflats

Further justification for inclusion

Ringabella Estuary comprises 122 ha of mud and sandflats in a secluded valley to the south of Cork Harbour. It supports a diversity of wintering waterbirds including numbers of Black-tailed Godwit that exceed the threshold of all-Ireland importance. Numbers of Redshank recorded during the 2010/11 NPWS

Waterbird Survey Programme equate to a peak density of 0.8 Redshank ha^{-1} , which is a relatively high density (e.g. the whole site average intertidal foraging density of Redshank at Dublin Bay which occurs in internationally important numbers, is 0.5 Redshank ha^{-1}). The waterbird community recorded at Ringabella Estuary is considered typical for a river-valley estuary that exhibits a gradient of fine muds to coarser sediments at the estuary mouth. The estuary is currently counted as part of I-WeBS and is accessible and relatively easy to monitor during both high and low tide periods.

Overall, in terms of habitat and waterbird species use, Ringabella Estuary appears to fulfil the necessary criteria for inclusion in the SPA network as a compensatory measure for the loss of 2.2 ha in the Tolka Estuary.

5.0 LINK WITH CORK HARBOUR SPA

Ringabella Estuary can be considered to be ecologically connected to Cork Harbour and it is thought that birds that use this estuary are likely to distribute across the wider sections of the Cork Harbour complex. This is confirmed by the sightings of colour-ringed Black-tailed Godwits at Ringabella Estuary that have also been observed at Lough Beg in Cork Harbour.

Should Ringabella Estuary be progressed to the designation stage it would be appropriate that the protective regime that is framed by Cork Harbour SPA is extended to this new subsite.

Cork Harbour SPA is currently listed for the following species:

- Little Grebe
- Great Crested Grebe
- Cormorant
- Grey Heron
- Shelduck
- Wigeon
- Teal
- Pintail
- Shoveler
- Red-breasted Merganser
- Oystercatcher
- Golden Plover
- Grey Plover
- Lapwing
- Dunlin
- Black-tailed Godwit
- Bar-tailed Godwit
- Curlew
- Redshank
- Black-headed Gull
- Common Gull
- Lesser Black-backed Gull
- Common Tern

The protective regime associated with these aforementioned species (or any future change to the listed species of Cork Harbour SPA) should then be extended to the Ringabella Estuary subsite.

Cork Harbour SPA is also listed for its wetland habitat in its own right as a resource for the regularly-occurring migratory waterbirds that utilise it. It would therefore follow that the extent of the wetland habitat contained within the Ringabella Estuary subsite be incorporated into the overall listed wetland extent of Cork Harbour SPA.

As this area is regularly counted as part of the larger Cork Harbour complex through I-WeBS there should be no significant increase in the effort required to monitor the constituent birds if it was designated as an SPA.

6.0 REFERENCES

Connor, D. W., Allen, J. H., Golding, N., Howell, K. L., Lieberknecht, L. M., Northern, K. O. and Reker, J. B. (2004) *The Marine habitat classification for Britain and Ireland*. Version 04.05. JNCC, Peterborough, UK. www.jncc.gov.uk/MarineHabitatClassification

Crowe, O. & Holt, C. (2013) Estimates of waterbird numbers wintering in Ireland 2006/07 – 2010/11. *Irish Birds* 9, 545-552.

Nairn, R. (2013) Winter Bird Surveys in Dublin Port and Tolka Estuary, 2009/10 to 2012/13. Report to Dublin Port Company. Natura Environmental Consultants. Wicklow.

NPWS (2012) Site Synopsis - South Dublin Bay and River Tolka Estuary SPA (Site Code 4024) National Parks & Wildlife Service. 2012.

NPWS (2013) South Dublin Bay SAC (Site Code 0210). Conservation objectives supporting document – marine habitats. Version 1. July 2013.

Ravenscroft, N. O. M. & Beardall, C. H. (2003) The importance of freshwater flows over estuarine mudflats for wintering waders and wildfowl. *Biological Conservation* 113, 89-97.

ANNEX 1 – BOUNDARY MAPPING

Ringabella Bay Site Boundary

B11 (N1) – other boundary, edge of pavement that runs along the upper shore;

B12 (N2) – unmarked boundary, unmarked gap between pavement and wall (slip);

B12 (N3) - unmarked boundary, unmarked gap between pavement and wall;

B4 – wall;

B4/B11 (N4) – wall/rock armour;

B11 (N5) – high water mark. Shoreline is 'messy' although walls and linear features in places, these are not consistent so no continual boundary is present; HWM considered the best;

B12 (N6) – unmarked boundary, unmarked gap due to a slip;

B1 – hedge;

B2 – treeline;

B11/B2 – take as high water mark or line of vegetation;

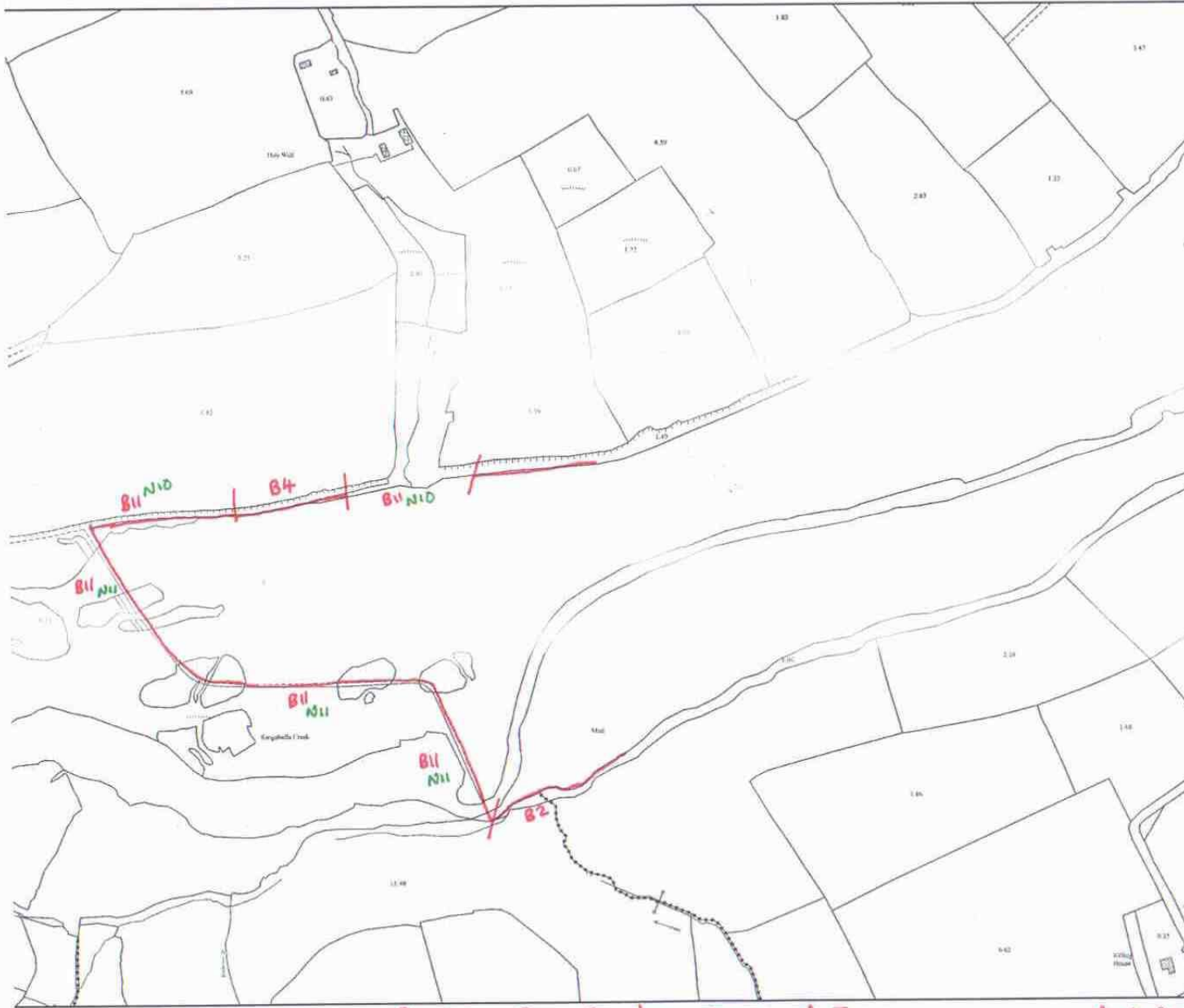
B12 (N7) - unmarked boundary across road;

B11 (N8) – HWM, cliff-lined shoreline;

B2/B4 (N9) – sea wall and treeline, where there are gaps in the seawall, use treeline;

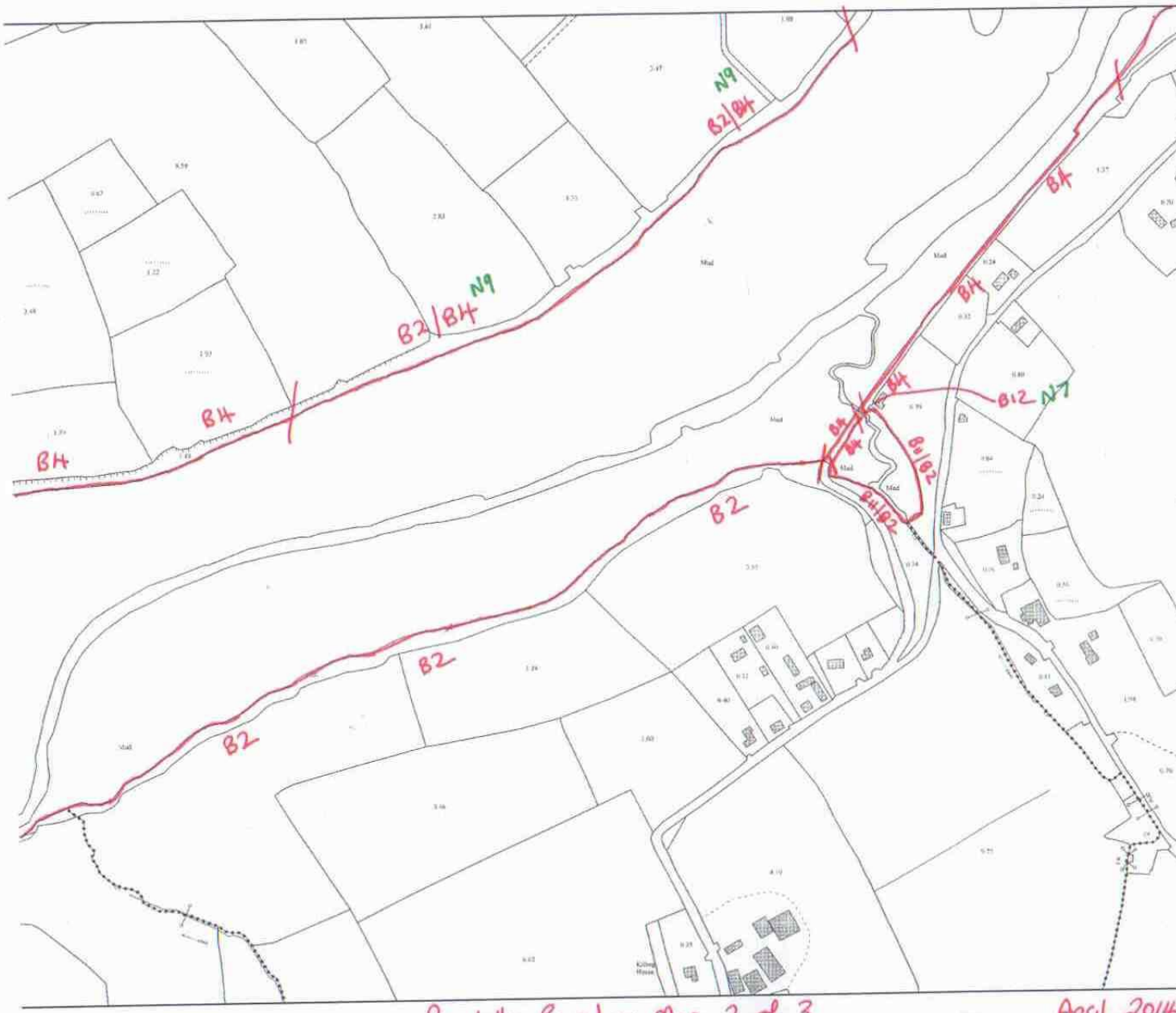
B11 (N10) – unmarked boundary take HWM;

B11 (N11) – embankment/barrage. Likely has a stone interior but is a grassy embankment for much of its length.



Ringabella Bay Boundary Map 1 of 3

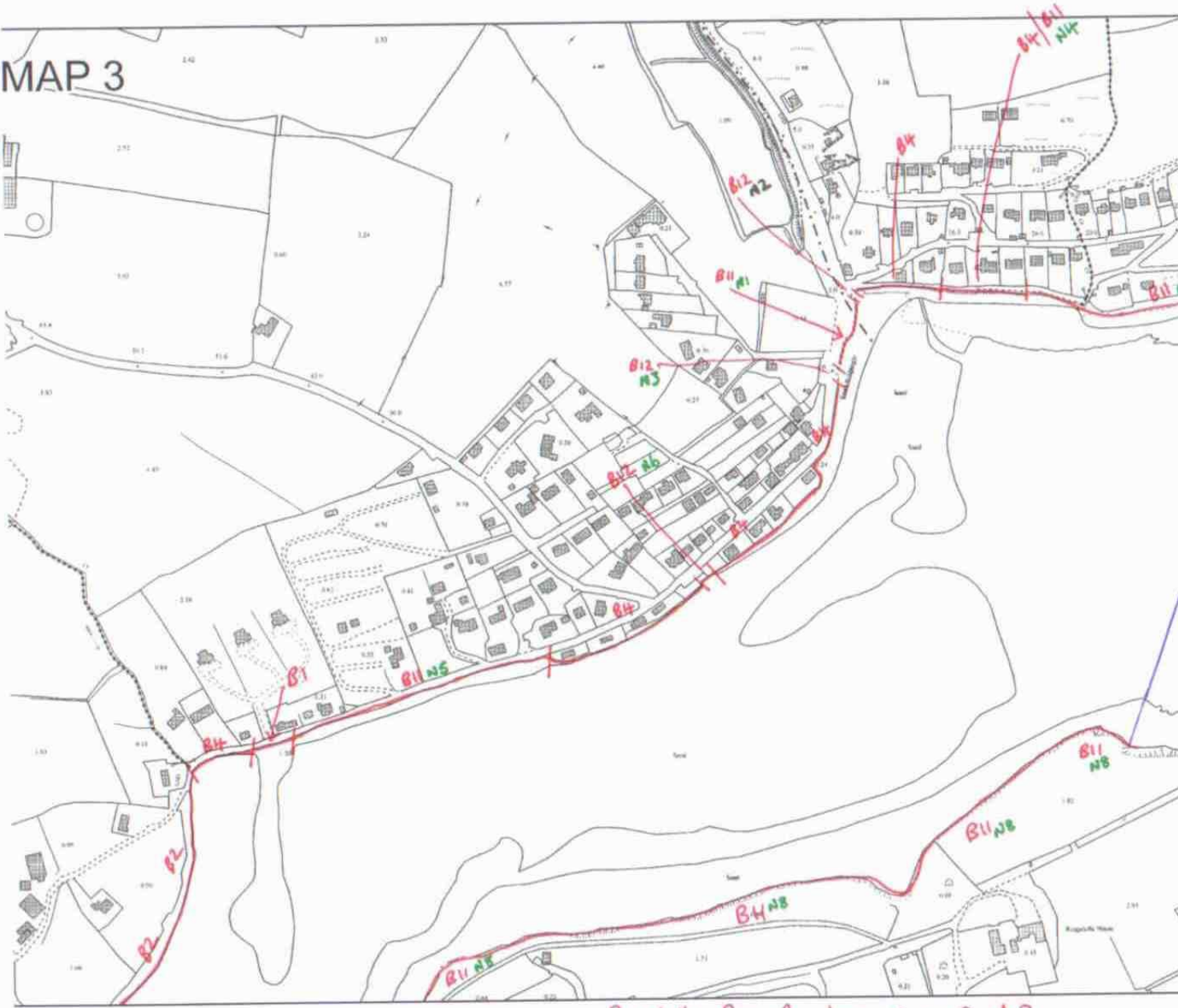
April 20...



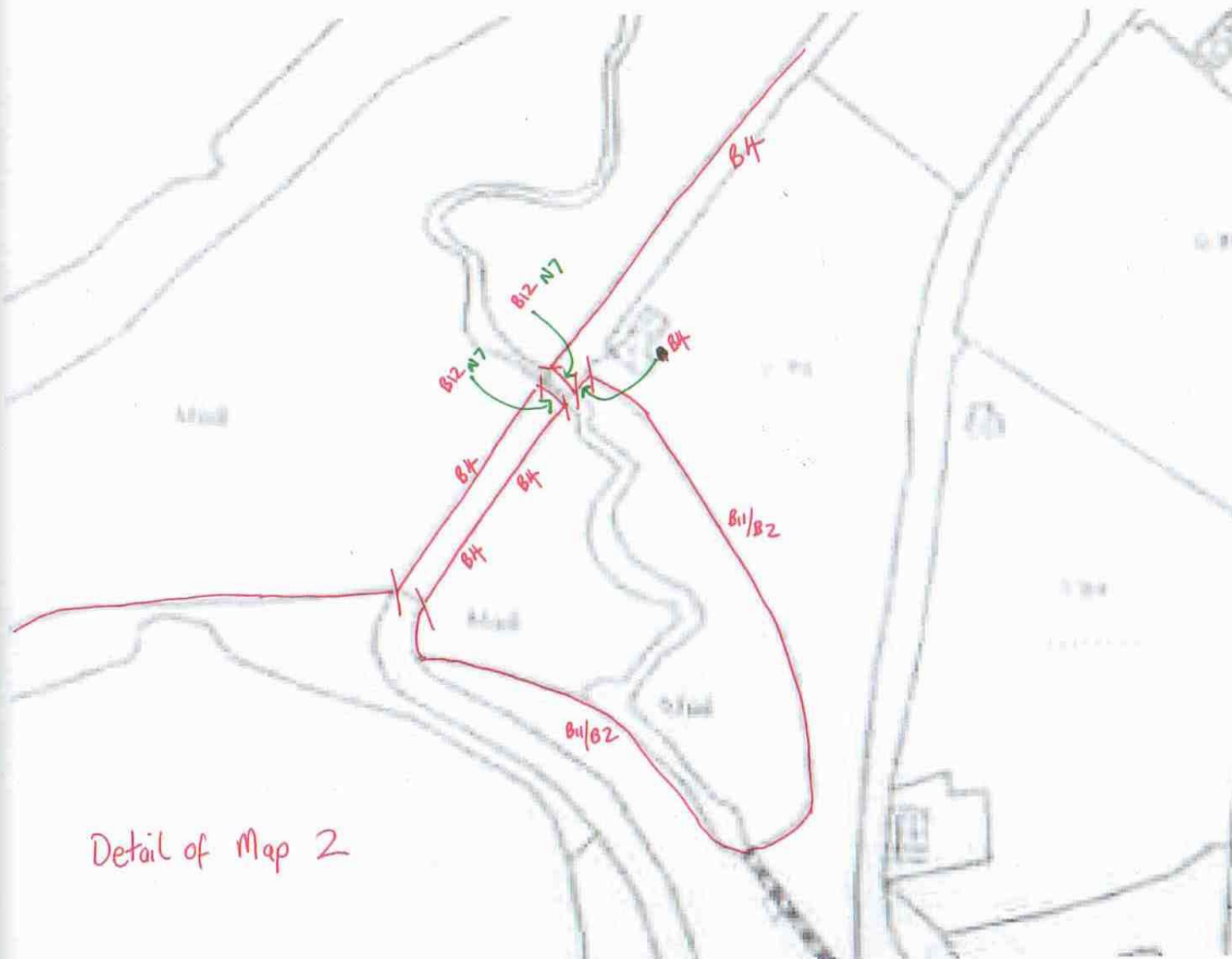
Ringabella Boundary Map 2 of 3

April 2014

MAP 3



Ringabella Bay Boundary Map 3 of 3



Detail of Map 2

APPENDIX 4 ACTION GRID

CION Infringement Reference	Article of the Directive	Specific Infringe- ment Issue	Action being taken (to address each specific issue)	Timescale for completion of each issue
C 418/04	1st Complaint Article 4 (1) and (2) Birds Directive	Confirmation of Classification through Statutory Instrument	Of Ireland's 154 SPA sites, 139 sites have now been designated by S.I. and a further 8 are being drafted. The remaining 7 SPAs are still within the appeals process and will be designated as soon as the boundaries are finalised.	Difficulties in the appeals process have slowed progress, but the target is for completion of 150 SPA sites by September 2016 and the remainder early in 2017.
		The inclusion of an additional SPA site for the breeding Dunlin (<i>Calidris alpina schinzii</i>)	An extension to Blacksod Bay SPA was classified in June, 2013 and a further new site for this species - Doogort Machair SPA was also classified in July 2013.	The Statutory Instrument template revision will be completed shortly, allowing completion of designation.
		Enhanced measures for the protection of the Corncrake	Corncrake strategy published. New Corncrake measure in GLAS; other schemes continue	Ongoing
		Compensatory Habitat for Dublin Bay	Ringabella Estuary in County Cork has been identified as the most suitable site to compensate for the Dublin Bay infill. The site has been advertised and notified in March 2015 and will be included in the Cork Harbour SPA (4030) when the appeal process has concluded.	The Statutory Instrument template revision will be completed shortly, allowing completion of designation.

CION Infringement Reference	Article of the Directive	Specific Infringe- ment Issue	Action being taken (to address each specific issue)	Timescale for completion of each issue
	4th Complaint Article 4 (4) of the Birds Directive	Failure to transpose and apply wider countryside requirements as set out in Article 4 (4) of the Birds Directive	Details of ongoing actions in main text.	Ongoing

CION Infringement Reference	Article of the Directive	Specific Infringeme nt Issue	Action being taken (to address each specific issue)	Timescale for completion of each issue
--	---	---	--	---

	<p>5th Complaint Article 6(2)-(4) of the Habitats Directive</p>	<p>Failure to ensure appropriate assessment of aquaculture projects</p>	<p>See Appendix 5 for details</p> <ul style="list-style-type: none"> • Detailed data collection in 91 Bays/Estuaries • Detailed analysis of raw data collected • Setting Conservation Objectives to be met in each site • Carrying out Appropriate Assessments of each licence application/fishery plan against the detailed Conservation Objectives set • Determination of Licences/Fisheries on the basis of the AA & other relevant factors 	<p>Detail and updated work programme provided in Appendix 5</p>
--	--	---	--	---

Appendix 5: Management of Fisheries and Aquaculture Activities in Natura 2000 sites in Ireland (Amendments/Revised Narrative shown in red)

Progress update, May 2019

Background

Since 2009 Ireland has, with the agreement of the Commission, been working on bringing its aquaculture and fisheries in Natura 2000 sites into full compliance with the Habitats and Birds Directives in order to comply with the decision of the European Court of Justice in case C418/04.

Ireland's work programme for this objective is defined in the 2009 document - *A Roadmap towards the Management of Fisheries and Aquaculture Activities in Natura 2000 sites in Ireland*. The document identified 3 key elements i.e. Technical, Policy & Regulation and Interim Arrangements as part of the Roadmap to Compliance.

This document provides an update on the progress made to date on each of these elements. The document headings reflect the sequence of steps involved in the implementation of Article 6 at each designated site from the initial step of collection of baseline ecological data for setting of conservation objectives, the profiling of industry activity, development of fishery plans, research to support assessment of significant effects, appropriate assessment (art 6.3) and risk assessment (art 6.2), the consultation process, legislation to implement findings of assessments and enhanced ecological and regulatory monitoring where required.

The Roadmap

The main deliverable identified in the roadmap was the production of Appropriate Assessments for Article 6.3 of the Habitats Directive of Fisheries and Aquaculture activities in Natura 2000 sites in Ireland.

This document follows the following structure:

1. Programme of collection of benthic data on Natura 2000 sites
Programme of collection of data in SPAs on habitat use by waterbirds
2. Setting of Conservation objectives
3. Research to support AA, risk assessment and recommendations
4. Aquaculture
 - Framework legislation
 - Procedures operated in relation to aquaculture licensing
 - Profiling of industry activity
 - Appropriate Assessments
 - Consultation process
 - Policy and regulation following assessment
 - Enhanced regulatory monitoring
 - Work programme
5. Fisheries
 - Framework legislation
 - Procedures operated in relation to sea-fisheries in Natura 2000
 - Profiling of industry activity
 - Article 6 assessments

Consultation and publication of information
Licensing following appropriate assessment
Monitoring and control following licensing
Work programme 2013-present
6. Post Assessment Monitoring Activities

Annex 1: Appropriate Assessment and Risk Assessment of Sea-Fisheries

Annex 2: List of baseline benthic surveys in SACs and SPAs

1. Programme of collection of benthic data in Natura 2000 sites

Surveys were carried out in SACs designated for intertidal mudflats and sandflats, large shallow inlets and bays, estuaries, reefs and sea caves as well as in SPAs designated for wading water birds and for scoter populations. The purpose of these data collection exercises was to provide baseline information on species and habitat extent within the feature of interest. These data are in turn used to generate Conservation Objectives for the features present within the Natura site.

The programme of data collection is complete. All data has been submitted to the Marine Institute and following internal QA/QC and validation it is transferred to NPWS who use it to set Conservation Objectives. The list of sites with completed surveys and their status is provided in Annex 2.

Programme of collection of data in SPAs on habitat use by water birds

This involved collection of low tide count data that provided spatial information on habitat use by birds. In addition the annual high tide roost counts (iWeBs) were continued at all SPAs.

Fieldwork for all of the relevant sites (i.e. primarily intertidal sites designated for non-breeding waterbirds) has now been completed by the baseline survey team (Table 1).

Table 1. SPAs where low tide counts of waterbirds were completed

Site Code	Site name	Winter
800004075	LOUGH SWILLY	2009/2010
800004029	CASTLEMAINE HARBOUR	2009/2010
800004032	DUNGARVAN HARBOUR	2009/2010
800004026	DUNDALK BAY	2009/2010
800004076	WEXFORD HARBOUR AND SLOBS (incl RAVEN 4019)	2009/2010
800004031	INNER GALWAY BAY	2009/2010
800004033	BANNOW BAY	2009/2010
800004034	TRAWBREAGA BAY	2009/2010
800004151	DONEGAL BAY	2009/2010
800004188	TRALEE BAY COMPLEX	2009/2010
800004037	BLACKSOD BAY/BROADHAVEN	2009/2010
800004028	BLACKWATER ESTUARY	2009/2010
800004020	BALLYTEIGUE BURROW	2011/2012
800004022	BALLYCOTTON BAY	2010/2011
800004023	BALLYMACODA BAY	2010/2011
800004081	CLONAKILTY BAY	2010/2011
800004027	TRAMORE BACK STRAND	2010/2011
800004030	CORK HARBOUR	2010/2011
800004077	RIVER SHANNON AND RIVER FERGUS ESTUARIES	2010/2011
800004219	COURTMACSHERRY BAY	2010/2011
800004182	MID CLARE COAST	2010/2011
800004013	DRUMCLIFF BAY	2010/2011
800004035	CUMMEEN STRAND	2010/2011
800004036	KILLALA BAY/MOY ESTUARY	2010/2011
800004078	CARLINGFORD LOUGH	2010/2011

800004087	LOUGH FOYLE	2011/2012
800004129	BALLYSADARE BAY	2010/2011
800004006	N. BULL IS. (& S. DUBLIN BAY,R.TOLKA EST. 4024)	2011/2012
800004015	ROGERSTOWN	2011/2012
800004016	BALDOYLE BAY	2011/2012
800004025	BROADMEADOW/SWORDS ESTUARY	2011/2012
800004080	BOYNE ESTUARY	2011/2012
800004158	RIVER NANNY ESTUARY AND SHORE -	2011/2012

2. Setting of Conservation Objectives

Specific conservation objectives for designated features have been developed by the National Parks & Wildlife Service for 114 sites (77 SACs; 37 SPAs). (Table 2).

Table 2. Sites for which conservation objectives were developed

Code	Name
0020	Black Head-Poulsallagh Complex SAC
0077	Ballymacoda (Clonpriest and Pillmore) SAC
0090	Glengarriff Harbour and Woodland SAC
0091	Clonakilty Bay SAC
0097	Lough Hyne Nature Reserve and Environs SAC
0101	Roaringwater Bay and Islands SAC
0133	Donegal Bay (Murvagh) SAC
0147	Horn Head and Rinclevan SAC
0181	Rathlin O'Birne Island SAC
0191	St. John's Point SAC
0194	Tranarossan and Melmore Lough SAC
0199	Baldoyle Bay SAC
0204	Lambay Island SAC
0205	Malahide Estuary SAC
0206	North Dublin Bay SAC
0208	Rogerstown Estuary SAC
0210	South Dublin Bay SAC
0212	Inishmaan Island SAC
0213	Inishmore Island SAC
0268	Galway Bay Complex SAC
0328	Slyne Head Islands SAC
0335	Ballinskelligs Bay and Inny Estuary SAC
0343	Castlemaine Harbour SAC
0455	Dundalk Bay SAC
0458	Killala Bay/Moy Estuary SAC
0470	Mullet/Blacksod Bay Complex SAC
0472	Broadhaven Bay SAC
0495	Duvillaun Islands SAC
0507	Inishkea Islands SAC
0622	Ballysadare Bay SAC
0625	Bunduff Lough and Machair/Trawalua/Mullaghmore SAC

0627	Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC
0671	Tramore Dunes and Backstrand SAC
0696	Ballyteige Burrow SAC
0697	Bannow Bay SAC
0707	Saltee Islands SAC
0710	Raven Point Nature Reserve SAC
0764	Hook Head SAC
0781	Slaney River Valley SAC
1021	Carrowmore Point to Spanish Point and Islands SAC
1040	Barley Cove to Ballyrisode Point SAC
1058	Great Island Channel SAC
1090	Ballyness Bay SAC
1141	Gweedore Bay and Islands SAC
1190	Sheephaven SAC
1230	Courtmacsherry Estuary SAC
1275	Inisheer Island SAC
1482	Clew Bay Complex SAC
1680	Streedagh Point Dunes SAC
1741	Kilmuckridge-Tinnaberna Sandhills SAC
1957	Boyne Coast and Estuary SAC
2012	North Inishowen Coast SAC
2070	Tralee Bay and Magharees Peninsula, West to Cloghane SAC
2074	Slyne Head Peninsula SAC
2111	Kilkieran Bay and Islands SAC
2158	Kenmare River SAC
2159	Mulroy Bay SAC
2161	Long Bank SAC
2162	River Barrow and River Nore SAC
2165	Lower River Shannon SAC
2170	Blackwater River (Cork/Waterford) SAC
2172	Blasket Islands SAC
2250	Carrowmore Dunes SAC
2259	Tory Island Coast SAC
2261	Magharee Islands SAC
2262	Valencia Harbour/Portmagee Channel SAC
2263	Kerry Head Shoal SAC
2264	Kilkee Reefs SAC
2265	Kingstown Bay SAC
2268	Achill Head SAC
2269	Carnsore Point SAC
2274	Wicklow Reef SAC
2283	Rutland Island and Sound SAC
2287	Lough Swilly SAC
2306	Carlingford Shore SAC
2953	Blackwater Bank SAC
3000	Rockabill to Dalkey Island SAC
4002	Saltee Islands SPA
4006	North Bull Island SPA
4013	Drumcliff Bay SPA
4014	Rockabill SPA
4015	Rogerstown Estuary SPA
4016	Baldoyle Bay SPA

4019	The Raven SPA
4020	Ballyteige Burrow SPA
4022	Ballycotton Bay SPA
4023	Ballymacoda Bay SPA
4024	South Dublin Bay and River Tolka Estuary SPA
4025	Malahide Estuary SPA
4026	Dundalk Bay SPA
4027	Tramore Dunes and Back Strand SPA
4028	Blackwater Estuary SPA
4029	Castlemaine Harbour SPA
4030	Cork Harbour SPA
4031	Inner Galway Bay SPA
4032	Dungarvan Harbour SPA
4033	Bannow Bay SPA
4034	Trawbreaga Bay SPA
4035	Cummeen Strand SPA
4036	Killala Bay/Moy Estuary SPA
4037	Blacksod Bay/Broad Haven SPA
4075	Lough Swilly SPA
4076	Wexford Harbour and Slobs SPA
4077	River Shannon and River Fergus Estuaries SPA
4078	Carlingford Lough SPA
4080	Boyne Estuary SPA
4081	Clonakilty Bay SPA
4087	Lough Foyle SPA
4129	Ballysadare Bay SPA
4151	Donegal Bay SPA
4158	River Nanny Estuary and Shore SPA
4182	Mid-Clare Coast SPA
4188	Tralee Bay Complex SPA
4219	Courtmacsherry Bay SPA

3. Research to support AA, risk assessment and recommendations

– *Compilation of habitat sensitivity reports*

As new habitats were being classified and mapped by the benthic surveys, with particular sets of characterising species, we needed to determine the sensitivity of these habitats to disturbance and in particular to disturbance that may be caused by fisheries and aquaculture. Again we commissioned literature reviews that resulted in habitat sensitivity assessments as a resource that was then available to the AA process. This exists as a series of 8 reports which constitute habitat reviews or ‘pro-formas’.

Habitat sensitivity ‘pro-formas’ have been prepared for 17 habitat types (listed below). The habitat pro-formas are mainly structured by sediment type, each sediment type has a very high-level introduction followed by more detailed biotope/habitat level assessments which are accompanied by individual species sensitivity analysis.

Habitat types for which sensitivity analysis ‘pro-formas’ have been prepared are:

1. Muddy sand -sublittoral
2. Fine sand -littoral
3. Muddy sand -littoral
4. Fine sand -sublittoral
5. Mixed sediment –sublittoral (coarse)
6. Mud -littoral
7. Mixed sediment -littoral
8. Mixed sediment –sublittoral (polychaetes and bivalves)
9. Saltmarsh
10. Reef –littoral (exposed)
11. Reef-littoral (sheltered)
12. Reef-sublittoral (exposed)
13. Maerl
14. Zostera
15. Ostrea edulis dominated community
16. Reef-subtidal (sheltered)
17. Reef-sublittoral (Laminaria dominated-exposed)

The habitat pro-formas are produced as a series of 8 reports. These are available to view or download from the open access repository of the Marine Institute library (<http://oar.marine.ie/>)

- *New research to support AA process where necessary*

Prior to beginning the AA process at particular sites, and using the industry activity profiles, we identified activity-habitat-species interactions for which there were no suitable scientific data to support evaluation of significance in the AA process. Where information for such assessment was completely lacking in the literature i.e. no case studies, we commissioned original research. This was mainly in relation to the potential disturbance of aquaculture activity, such as oyster culture, which is a widespread activity, and intertidal mussel relaying on bird habitat use. Notable outputs of this research include

- **Study of waterbird use of the intertidal mussel nursery area at Castlemaine Harbour**, which was undertaken to examine the effect of an intertidal mussel fishery on waterbird utilisation of intertidal habitat in Castlemaine Harbour. Results of this study are available at http://www.fishingnet.ie/media/fishingnet/content/fisheriesinnaturaareas/fisheriesnaturaplanconsultations/Annex_V_%20Mussels_Gittings_and_ODonohue_2011a.pdf
- **Strategic study of the relationship between waterbird distribution and oyster trestles**, the aim of which was to identify consistent patterns across sites of associations between waterbird distribution and the presence of oyster trestles on the shore. This study was carried out at 6 sites including Bannow Bay, Co. Wexford; Waterford Harbour & Dungarvan, Co. Waterford; Ballymacoda, Co. Cork; Castlemaine, Co. Kerry; and Poulmasherry, Co. Clare. A more detailed study of the relationship between waterbird distribution and oyster trestles was carried out in Dungarvan Harbour. Results of these studies are available in *Gittings & O'Donoghue (March 2012). The effects of intertidal oyster culture on the spatial distribution of waterbirds*. Unpublished report for the Marine Institute. An abridged version of this report has been accepted for publication in *Wader Study (Journal of International Wader Study Group)*.

- **Effects of oyster trestles on marine benthos.** A study is ongoing whereby benthic infauna will be estimated in and around the structures used for intertidal oyster culture. The study is designed to delineate the extent of the impact of the activities (i.e. trestles and access mechanisms – tractors) on infaunal biota. These data will be compared with control locations reflective of similar habitats yet away from any likely impact. The goal of the study is to inform assessment of intertidal oyster culture activities and provide increased certainty in the conclusions drawn. This study is completed and has been published in the Marine Pollution Bulletin - <http://dx.doi.org/10.1016/j.marpolbul.2015.04.013>. A second study was undertaken as a follow-on from the first, whereby the effects of severe weather events (during winter 2013/2014) on habitats in the vicinity of oyster trestles were assessed. It concluded that while the weather events did impact on habitats, it was not sufficient to neutralise the impact/disturbance of access routes on habitats. This study was submitted to the **Marine Pollution Bulletin** 1. O’Carroll J, Quinn C, Forde J, Patterson A, O’Beirn F.X, Kennedy R. 2016. Impact of prolonged storm activity on the Ecological Status of intertidal benthic habitats within oyster (*Crassostrea gigas*) trestle cultivation sites. Marine Pollution Bulletin. 110: 460–469

4. Aquaculture

Framework Legislation

The obligation to undertake Appropriate Assessment (AA) derives from Article 6(3) of the Habitats Directive. The Habitats Directive is transposed in Ireland in the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011) and this legislation is utilised to determine whether screening for AA or a full AA is required in a Natura or adjacent site.

In broader terms, the carrying out of aquaculture is regulated by the Fisheries (Amendment) Act 1997. The licensing authority (i.e. the Minister, an officer to whom functions have been delegated by the Minister, or the Aquaculture Licence Appeals Boards) may, if it is satisfied to do so, license a person, at a place or in waters specified in the licence, to engage in aquaculture or such operations in relation to aquaculture, and subject to such conditions, as it thinks fit and specifies in the licence.

The Minister for Agriculture, Food and the Marine has two distinct roles in respect of aquaculture:

- A general policy role – the Minister can issue general policy directives under section 62 of the Fisheries (Amendment) Act, 1997
- A regulatory role – making determinations in respect of aquaculture licence applications.

In accordance with **regulations 4A** and 5.2 of SI No. 236 of 1998 the Minister may require the applicant, in relation to each individual aquaculture licence application **for “intensive fish farming”**, to submit an **Environmental Impact Assessment Report (EIAR)** if the Minister considers that the proposed aquaculture is likely to have significant effects on the environment. The Minister’s determination as to whether or not an **EIAR** is required is published on the Department’s website.

The Foreshore Act 1933, for which the Minister has power to grant leases / licences, regulates the placement of structures on the foreshore associated with the carrying out of licensed aquaculture.

Licensees, whose licences have expired, but who have applied for renewal of their aquaculture licences have their continued aquaculture operations authorised by section 19A (4) of the Fisheries (Amendment) Act 1997. This allows aquaculturists, who have submitted valid renewal applications, to continue aquaculture activities, subject to the terms and conditions of their old

licences, pending a decision on their renewal applications. The significant work involved in implementing the Appropriate Assessment process has resulted in delays in the aquaculture licensing process with the result that a significant element of the industry is now relying on this section of the Act. However, the Irish authorities are committed to repealing section 19A (4) following the completion of the agreed 'Roadmap' process, thus ensuring that all aquaculture will be licensed in accordance with the requirements of the Birds and Habitats Directives.

Procedures operated in relation to Aquaculture Licensing

The procedural steps relating to aquaculture licensing, including public and statutory consultation, are set out in SI No. 236 of 1998 – Aquaculture (Licence Application) Regulations, 1998. Notice of aquaculture licence applications are published in a newspaper circulating in the vicinity of the proposed aquaculture. This notice specifies where the documentation relating to the application may be inspected. A person may make written submissions or observations within a prescribed time period (as set out in the Statutory Instrument). In addition, aquaculture licence applications are sent to statutory consultees (as prescribed in regulation 10 of SI No. 236 of 1998).

These procedures are illustrated below:

Step 1	Aquaculture licence application received.
Step 2	Application checked – if location in or adjacent to Natura 2000 area, sent for Appropriate Assessment
Step 3	Appropriate Assessment carried out by the Marine Institute (Department's scientific advisors) following the setting out of the conservation objectives by the National Parks and Wildlife Service (NPWS)
Step 4	On receipt of the Appropriate Assessment (AA) the Department in conjunction with its scientific and technical advisors carries out an Environmental Impact Assessment (EIA) screening where relevant to ensure compliance with EU Environmental Directives (for some aquaculture activities, e.g. marine finish, an EIAR is compulsory)
Step 5	Submission of set of policy recommendations for entire bay/Natura site for Ministerial approval
Step 6(a)	All applications accompanied by the Appropriate Assessment and where relevant the EIA screening (or EIAR) are sent to Statutory Consultees (this includes NPWS, An Taisce, County Councils, Department of Environment etc)
Step 6(b)	All applications accompanied by the Appropriate Assessment and where relevant the EIA screening (or EIAR) are sent to Public consultation - allowing members of the public to comment
Step 7	All information received is evaluated by Department Officials and a recommendation made to the Minister
Step 8	Ministerial Decision to either grant or refuse the application
Step 9	Publication of Ministerial Decision
Step 10	Decision may be appealed to the Aquaculture Licences Appeals Board (ALAB) - the independent appeals body
Step 11	Aquaculture Licences Appeals Board (ALAB) publish their decision (Aquaculture Licences Appeals Board (ALAB) decision can be judicially reviewed).

Profiling of industry activity

Although in the case of aquaculture the list of licences and applications in each site is known, details of the actual activities at each site, such as access routes, species in production, level of production and spatial use of the site were profiled for each licence holder to inform the AA process. **Profiling of aquaculture has been completed in the following bays:**

- Dundalk Bay
- Castlemaine Harbour and inner Dingle Bay
- Roaringwater Bay
- Lough Swilly
- Donegal Bay
- Clew Bay
- Galway Bay
- Dungarvan Harbour
- Valentia / Portmagee Channel
- Tralee Bay
- Kenmare River
- Trawbreaga Bay
- Wexford Harbour
- Ballycotton Bay
- Lower River Shannon
- Cummeen Strand / Drumcliff Bay
- Blacksod / Broadhaven Bays
- Mulroy Bay
- Sheephaven
- Bannow Bay
- Ballymacoda
- Gweedore Bay and Islands
- Slyne Head Peninsula (Mannin Bay)
- Kilkieran Bay
- Waterford Harbour
- West of Ardara – Maas Road
- Rutland Island and Sound (Dungloe Bay)
- Killala Bay
- **Ballyness Bay**
- **Carlingford Lough**
- **Cork Harbour**

Appropriate Assessments

As the roadmap indicated, aquaculture operations were to be assessed under Article 6.3 (appropriate assessment).

The current situation is as follows:

- **Dundalk Bay SAC and SPA**
The Appropriate Assessment for Dundalk Bay was conducted at the beginning of the process. There was no aquaculture in the bay at the time so wild fisheries such as cockles were assessed and dealt with under the 'Fisheries segment' of the Programme of Measures. In the interim the Department received a number of aquaculture licence applications and an Appropriate Assessment report for proposed aquaculture in the bay is pending.

- Castlemaine Harbour SAC and SPA**

The Appropriate Assessment documentation and aquaculture licensing determinations for the bay to date are available on the Department's website at <https://www.agriculture.gov.ie/seafood/aquacultureforeshoremanagement/aquaculturelicensing/>. The Appropriate Assessment process and aquaculture licensing determinations to grant the licences sought (on the applications available at the time of the initial Appropriate Assessment) were completed for Castlemaine Harbour in 2013. A significant number of new aquaculture licence applications were received by the Department subsequent to the carrying out of the initial Appropriate Assessment and a second Appropriate Assessment was carried out in 2018. The licensing determinations which followed were largely negative and licences sought were refused on a number of grounds, including the potential for proposed aquaculture activities to cause significant disturbances to key bird species and reductions in their density and functional foraging habitat area. The Department has recently received a number of new aquaculture licence applications for Castlemaine Harbour and an updated Appropriate Assessment report is pending.
- Roaringwater Bay and Islands SAC**

The Appropriate Assessment process and aquaculture licensing determinations have been completed for Roaringwater Bay. The Appropriate Assessment documentation and licensing determinations for the bay are available on the Department's website. Licensing in this bay is now regarded as complete, subject to the receipt of new licence applications.
- Lough Swilly SAC and SPA**

The Appropriate Assessment process (based on existing and proposed aquaculture at the time of assessment) was completed for Lough Swilly in 2013. The Department has produced an Appropriate Assessment Conclusion Statement outlining how it proposes to license aquaculture in these Natura sites in compliance with the Birds/Habitats Directives. The licensing determinations to date have resulted in a significant reduction in the footprint of existing aquaculture activity in the Lough (over 50% reduction). The Appropriate Assessment documentation and aquaculture licensing determinations for the bay to date are available on the Department's website.
- Donegal Bay (Murvagh) SAC and Donegal Bay SPA**

The Appropriate Assessment process and aquaculture licensing determinations (including refusal/variations to take account of Harbour Seal issues) have been completed for Donegal Bay in respect of the majority of the aquaculture licence applications. The Department has produced an Appropriate Assessment Conclusion Statement outlining how it proposes to license aquaculture in these Natura sites in compliance with the Birds/Habitats Directives. Additional data collection and monitoring was necessary in respect of the outstanding applications. The monitoring update has been evaluated by the Department and a number of licensing determinations have been made based on its findings. The Appropriate Assessment documentation and aquaculture licensing determinations for the bay to date are available on the Department's website. The Department has received a number of new aquaculture licence applications and an updated Appropriate Assessment report is pending.
- Dungarvan Harbour SPA**

The Appropriate Assessment process and licensing in Dungarvan Harbour is now regarded as complete, subject to the receipt of new licence applications. The Appropriate Assessment documentation and licensing determinations for the bay are available on the Department's website. The Department produced an Appropriate Assessment Conclusion Statement outlining how aquaculture was to be licensed in this Natura site in compliance with the Birds Directive. Details were provided on the adaptive management of the area, including the introduction of a tidal break through the reconfiguration of trestles, providing a single clear corridor of approximately 400 metres which is considered an exclusion zone with no shellfish

culture activities permitted. A monitoring programme commenced in September 2016 to measure the effectiveness of the creation of a 'bird corridor' in facilitating increased bird use of the area. This programme is being continued during the 2018/2019 season.

- **Clew Bay Complex SAC**

The Appropriate Assessment process was completed for Clew Bay in 2014 and aquaculture licensing determinations (based on the applications available at the time of assessment) were subsequently completed. In the interim the Department received a number of new aquaculture licence applications and an updated Appropriate Assessment report has been received by the Department. The findings of this report are being examined by the Department and an updated Appropriate Assessment Conclusion Statement is being prepared.

- **Valentia Harbour/Portmagee Channel SAC**

The Appropriate Assessment process based on the applications available at the time of assessment was completed for Valentia/Portmagee Channel in 2014. The Department has produced an Appropriate Assessment Conclusion Statement outlining how it is proposed to license and manage aquaculture activities in this Natura site. A number of licensing determinations have been made. The Appropriate Assessment documentation and licensing determinations for the bay to date are available on the Department's website. The Department has received a number of new aquaculture licence applications and an updated Appropriate Assessment report is pending.

- **Ballycotton Bay SPA**

The Appropriate Assessment process and aquaculture licensing determinations have been completed for Ballycotton Bay and are available on the Department's website. There was no existing aquaculture in the bay and the Appropriate Assessment process found that the proposed aquaculture would be likely to have significant effects on the protected species of this Natura site. The licences sought were refused as, in particular, there were no clear mitigation measures available to prevent the risk of the deterioration of the conservation status of protected shorebirds in the SPA.

- **Galway Bay Complex SAC and Inner Galway Bay SPA**

The Appropriate Assessment process based on the applications available at the time of assessment was completed for Galway Bay in 2014. An Appropriate Assessment Conclusion Statement has been produced outlining how it is proposed to license and manage aquaculture activities in these Natura sites. Licensing determinations have been made for a significant portion of the aquaculture which has been appropriately assessed. The Appropriate Assessment documentation and licensing determinations for the bay to date are available on the Department's website. The Department has received a number of new aquaculture licence applications and an updated Appropriate Assessment report is pending.

- **Kenmare River SAC**

The Appropriate Assessment report for Kenmare Bay has been completed and a draft Appropriate Assessment Conclusion Statement has been produced outlining how it is proposed to license and manage aquaculture activities in this Natura site (available on the Department's website). The majority of the licence applications (new and renewal) are currently at the public and statutory consultation stage of the licensing process. Licensing determinations are projected on these applications during 2019.

- **Drumcliff Bay/Cummeen Harbour (Sligo Bay) SAC and Drumcliff Bay SPA/Cummeen Strand SPA**

The Appropriate Assessment report has been completed and aquaculture licensing determinations have been completed for the majority of the licence applications in these

Natura sites. The Department has produced an Appropriate Assessment Conclusion Statement outlining how it is licensing aquaculture in these Natura sites in compliance with the Birds/Habitats Directives. The Appropriate Assessment documentation and licensing determinations for the bay to date are available on the Department's website.

- **Kilkieran Bay and Islands SAC**

The Appropriate Assessment report was completed in respect of Kilkieran Bay in 2015 and the findings have been examined by the Department. An updated Appropriate Assessment report is pending due to additional information arising on the status of the sites in the bay.

- **Trawbreaga Bay North Inishowen Coast SAC and Trawbreaga Bay SPA**

The Appropriate Assessment process and licensing determinations have been completed for a significant portion of the existing and proposed aquaculture activity in Trawbreaga Bay. The Department has produced an Appropriate Assessment Conclusion Statement outlining how it proposes to license aquaculture in these Natura sites in compliance with the Birds/Habitats Directives. The Appropriate Assessment documentation and aquaculture licensing determinations for the bay to date are available on the Department's website. The Department has received a number of new aquaculture licence applications and an updated Appropriate Assessment report is pending.

- **Gweedore Bay and Islands SAC**

The Appropriate Assessment process and licensing determinations have been completed for Gweedore Bay (available on the Department's website). Licensing in this bay is now regarded as complete, subject to the receipt of new licence applications.

- **Sheephaven SAC**

The Appropriate Assessment process has been completed for this Natura site. There is no existing aquaculture in the bay and licensing determinations were not made as applications were withdrawn during the process.

- **Waterford Harbour River Barrow and River Nore SAC**

The Appropriate Assessment process and aquaculture licensing determinations have been completed for Waterford Harbour. The Appropriate Assessment documentation and licensing determinations for the bay are available on the Department's website. Licensing in this bay is now regarded as complete, subject to the receipt of new licence applications.

- **Wexford Harbour and Slobbs SPA, the Raven SPA, Slaney River Valley SAC and Raven Point Nature Reserve SAC**

The Appropriate Assessment process and licensing determinations have been completed for a portion of the proposed aquaculture activity in Wexford Harbour. The Department has produced an Appropriate Assessment Conclusion Statement outlining how it proposes to license aquaculture in these Natura sites in compliance with the Birds/Habitats Directives. The Appropriate Assessment documentation and aquaculture licensing determinations for the bay to date are available on the Department's website. Licensing determinations are projected on the remaining applications (new and renewal) during 2019.

- **West of Ardara/Maas Road SAC**

The Appropriate Assessment Report for proposed aquaculture activity in Loughros Mor Bay has been completed and a draft Appropriate Assessment Conclusion Statement has been produced outlining how it is proposed to license and manage aquaculture activities in this Natura site (available on the Department's website). An updated Appropriate Assessment report has been received by the Department to include existing and proposed aquaculture activity in Gweebarra Bay which is also situated in the West of Ardara/Maas Road SAC. The

findings of this report are being examined by the Department and an updated Appropriate Assessment Conclusion Statement is being prepared.

- **Bannow Bay SAC and SPA**

The Appropriate Assessment process and aquaculture licensing determinations have been completed for Bannow Bay. The Appropriate Assessment documentation and licensing determinations for the bay are available on the Department's website. A winter monitoring programme of monthly low tide counts was initiated in September 2017 to provide greater confidence in shorebird count numbers for the SPA and to examine interaction between shorebird site usage and existing aquaculture (oyster culture) operations. This programme has continued through the 2018/19 season. Licensing in this bay is now regarded as complete, subject to the receipt of new licence applications.

- **Mulroy Bay SAC**

The Appropriate Assessment process and aquaculture licensing determinations have been completed for Mulroy Bay. The Appropriate Assessment documentation and licensing determinations for the bay are available on the Department's website. Licensing in this bay is now regarded as complete, subject to the receipt of new licence applications.

- **Mannin Bay Slyne Head Peninsula SAC**

The Appropriate Assessment report for Mannin Bay has been completed and a draft Appropriate Assessment Conclusion Statement has been produced by the Department outlining how it is proposed to license and manage aquaculture activities in this Natura site (available on the Department's website). Licensing determinations are projected on these applications during 2019.

- **Blacksod and Broadhaven Bays (Broadhaven Bay SAC/Blacksod Bay-Broadhaven SPA/Mullet-Blacksod Bay Complex SAC)**

The Appropriate Assessment process and aquaculture licensing determinations have been completed for Blacksod and Broadhaven Bays. The Appropriate Assessment documentation and licensing determinations for the bay are available on the Department's website. Licensing in this bay is now regarded as complete, subject to the receipt of new licence applications.

- **Loughros Beg Bay/Slieve Tooney/Tormore Islands SAC**

The Appropriate Assessment process and aquaculture licensing determinations have been completed for Loughros Beg Bay. The Appropriate Assessment Screening documentation and licensing determinations for the bay are available on the Department's website. Licensing in this bay is now regarded as complete, subject to the receipt of new licence applications.

- **Ballymacoda (Clonpriest and Pillmore) SAC and Ballymacoda Bay SPA**

The Appropriate Assessment process and aquaculture licensing determinations have been completed for Ballymacoda Bay and are available on the Department's website. Licensing in this bay is now regarded as complete, subject to the receipt of new licence applications.

- **Tralee Bay and Magharees Peninsula, West to Cloghane SAC and Tralee Bay Complex SPA**

The Appropriate Assessment report has been completed and the findings are being examined by the Department.

- **Lower River Shannon SAC and River Shannon and Fergus Estuaries SPA**

The Appropriate Assessment process and licensing determinations have been completed for a significant portion of the existing aquaculture activity in the Shannon Estuary. The Department has produced an Appropriate Assessment Conclusion Statement outlining how it proposes to license aquaculture in these Natura sites in compliance with the Birds/Habitats Directives. The Appropriate Assessment documentation and aquaculture licensing determinations for the bay to date are available on the Department's website. A winter

monitoring programme of monthly low tide counts was initiated in Poulnasherry Bay (located on the Clare side of the Shannon Estuary) during 2018/19 to fully determine the current and ongoing status of shorebird species in this portion of the SPA, in light of recent aquaculture licensing determinations allied with other potential stressors (i.e. heavy macroalgal fouling). Licensing determinations are projected for the remainder of the applications during 2019. An updated Appropriate Assessment report is also pending to assess a number of new aquaculture licence applications in the Estuary.

- **Ballyness Bay SAC**

The Appropriate Assessment report for Ballyness Bay has been completed and a draft Appropriate Assessment Conclusion Statement has been produced outlining how it is proposed to license and manage aquaculture activities in this Natura site (available on the Department's website). The public and statutory consultation stage of the licensing process has recently been completed for the proposed aquaculture in the bay. Licensing determinations are projected during 2019.

- **Rutland Island and Sound SAC**

The Appropriate Assessment report for the Rutland Island and Sound SAC has been completed and a draft Appropriate Assessment Conclusion Statement has been produced outlining how it is proposed to license and manage aquaculture activities in this Natura site. The public and statutory consultation stage of the licensing process is due to commence shortly. Licensing determinations are projected during 2019.

- **Carlingford Lough SPA and Carlingford Shore SAC**

The Appropriate Assessment report for Carlingford Lough has been completed and a draft Appropriate Assessment Conclusion Statement is being prepared by the Department outlining how it is proposed to license and manage aquaculture activities in these Natura sites. The public and statutory consultation stage of the licensing process is due to commence shortly. Licensing determinations are projected during 2019.

Consultation Process

From an aquaculture perspective, the AA is based on a list of licensed aquaculture activities and applications. Consultation takes place with technical and scientific advisors with a view to transferring the AA findings into specific licence conditions. There is a formal public and statutory consultation for each individual application which is set out in legislation.

Policy and regulation following Appropriate Assessment

The next step **where relevant** in the process is the carrying out of Environmental Impact Screening (for some aquaculture operations e.g. marine finfish an **Environmental Impact Assessment Report (EIAR)** is compulsory). The Minister may require applicants to submit an **EIAR** if he considers that the proposed aquaculture is likely to have significant effects on the environment. The Ministerial determination, on whether an **EIAR** is required or not, is published. This requirement (under EU EIA Directives) is separate from the Habitats requirements.

Each application goes to public and statutory consultation.

Specific draft licence conditions are prepared taking account of the Appropriate Assessment (AA) carried out by the Marine Institute and other information such as that received in the public/statutory consultation phase, as well as additional technical observations. Licences contain a clear reference to the AA and the Natura 2000 interests.

A Conclusion Statement is prepared by the 'Licensing Authority' (i.e. Minister for Agriculture, Food and the Marine) which outlines how aquaculture activities in the Natura site are being licensed in compliance with the Birds and Habitats Directives and is published on the Department's website. The Licensing Authority has to be satisfied, given the conclusions and recommendations of the Appropriate Assessment process and, if required, the implementation of measures that will mitigate certain pressures on Natura features, that the proposed aquaculture licensed activities are not likely to have a significant effect on the integrity of the relevant Natura site. The Conclusion Statement outlines the timescale and mechanisms through which mitigation measures, as required, will be secured, implemented and monitored.

Notwithstanding that the AA takes place on a Bay/Natura site basis, each aquaculture application is the subject of an individual recommendation to the Minister. In the case of a positive recommendation to the Minister, the draft licence incorporating the specific conditions is also sent for Ministerial approval.

The Ministerial decisions are published in newspaper/s circulating in the area of the aquaculture. The relevant public notice also provides a link to the Department's website, which outlines the reasons for the Minister's decision in each individual case. To summarise, the following material is available in relation to all aquaculture licence decisions:

- a) the general conditions attaching to all licences as set out in the licence templates which are available on the Department's website;
- b) reasons for the Minister's decision in individual cases which are also available on the Department's website;
- c) Licensing Authority's Appropriate Assessment Conclusion Statement which outlines how aquaculture in the particular 'Natura' site/s is being licensed in accordance with the requirements of the Birds/Habitats Directives (also on the Department's website).

The publishing of the above material on the Department's website provides information to enable an informed decision to be made on any possible appeal. This addresses the concerns raised in relation to the accessibility of documentation supporting the Minister's decision in sufficient time to enable an appeal to be made to Aquaculture Licensing Appeals Board (ALAB).

The Ministerial decision may be appealed to ALAB. The function of the Board is to provide an independent authority for the determination of appeals against decisions of the Minister for Agriculture, Food and the Marine on aquaculture licence applications. A person aggrieved by a decision of the Minister on an aquaculture licence application, or by the revocation or amendment of an aquaculture licence, may make an appeal within one month of publication (in the case of a decision) or notification (in the case of revocation / amendment).

In addition, ALAB also publishes its decision. Decisions of the State are open to judicial review in the normal way.

Marine fin fish and land based aquaculture licences are currently available online as part of the Department's upgrading of its online provision of services in respect of all aquaculture licences. Measures are in place to make all other current aquaculture licences available online as soon as possible consistent with available resources.

Enhanced regulatory monitoring

A dedicated Monitoring and Compliance Unit has been established within the Department to strengthen the adherence to the terms and conditions of all Aquaculture Licences. The Unit brings greater coherence to the existing monitoring system leading to enhanced monitoring and regulatory standards, practices and procedures. A structure for the systematic audit of licence conditions has

been put in place. This is a very substantial enhancement of the existing regulatory procedure and supplements all other inspections of sites.

The Unit avails of services provided by representatives of DAFM, MI, Engineering Division (DAFM), SFPA, MSO and BIM as necessary.

The areas targeted for audit include the following:-

Site:

- Navigational marking
- Location (within licenced boundaries)
- Cleanliness/redundant structures
- Access routes
- Planning permissions (if appropriate)

Structures

- Type of structure
- Alignment
- Moorings (if appropriate)
- Spacing

Stocking and Records

- Species and source
- Stocking density
- Stock movements
- Fish health
- Predator control
- Chemical usage
- Disposal of mortalities
- Fallowing
- Escapes

Environmental Monitoring

- Water quality
- Effluent discharge (if appropriate)
- Chemical discharge
- Benthic monitoring
- Waste management
- Emergency action plan

Specific Monitoring arising from Appropriate Assessment

The Department of Agriculture, Food and the Marine together with the Marine Institute are actively identifying specific monitoring requirements in the context of the AA conclusions and licence conditions for Natura 2000 sites over and above ongoing monitoring. This is to ensure that issues of special priority identified in the AA are the subject of enhanced post-licensing monitoring and controls.

Monitoring that is recommended in the Appropriate Assessment will take the form of a licence condition and will have the primary goal to provide additional certainty relating to the assessment conclusions. Monitoring is considered a mitigation measure as long as it is allied with specific and clear management measures. Any such monitoring protocols will be tailored to the specific issue at

hand and will focus upon the likely interaction between the feature of interest (e.g. wading birds) and the activity licensed (e.g. oyster trestle culture). Furthermore, monitoring may take the form of capture of additional baseline information (e.g. Castlemaine) in order to provide a more robust data with which to estimate likely interactions (e.g. species displacement).

The current situation is as follows:-

- Ecological monitoring and additional research was recommended as a consequence of the Castlemaine Appropriate Assessment process; these were translated into conditions in Schedule 4 of the aquaculture licences. The circumstances that will invoke ecological (e.g. bird) monitoring or the establishment of a monitoring framework at any of the aquaculture sites **has not been reached**. Monitoring at Castlemaine will be invoked following a request to exceed the 10% oyster trestle or 12% mussel seed cover by the aquaculture licence holder and this request is granted. Site usage will then be monitored and if significant change in site usage is realised, a bird monitoring / impact program will be initiated by the Marine Institute. As part of the ongoing activities at the licensed aquaculture sites, the Monitoring and Compliance Unit of DAFM and the MI are tasked to ensure that the operators are complying with the 10% and 12% licence thresholds.
- Additional research was also recommended in the Castlemaine Appropriate Assessment and this was completed in 2012 and comprised studies at 6 oyster trestle locations (including Castlemaine). The purpose of the study was to identify different bird species responses to structures. Validation of the findings of the assessment in Castlemaine was an additional output of this study. The output of a study focusing on the impact of oyster trestles on habitats has been published in the Marine Pollution Bulletin - <http://dx.doi.org/10.1016/j.marpolbul.2015.04.013>. This study was carried out at a range of oyster growing areas with the view to determining the likely influence the structures have on habitat features (species abundance, diversity as measured by composite indices). Similarly, this study was initiated in order to provide certainty to the conclusions in this and other assessments and validate the findings of other studies (these reports are referred to in the Programme of Measures - April 2014).
- In relation to Roaringwater Bay, there are no specific ecological monitoring requirements relating to aquaculture activities.
- Donegal Bay – During the Appropriate Assessment process it became apparent that insufficient data was available on Sanderling abundance and site usage within the outer portions of the SPA. In order to fully assess the sites, more accurate information relating to Sanderling stocks at these sites was required. Five sub-sites were surveyed (Mountcharles, Eddrim Estuary, Murvagh, Rossnowlagh, Aghrus Pt – Bundoran) with semi-monthly counts of Sanderling throughout the intertidal area of Donegal Bay undertaken between September 2014 and February 2015. The data allows an updated assessment as to the likely interactions between oyster trestle culture activity in the Mountcharles area and Sanderling. The Department has prepared an Appropriate Assessment Conclusion Statement outlining how it is proposed to licence aquaculture in this Natura site in compliance with the Birds/Habitats Directives (available on the Department’s website).
- Dungarvan Harbour – Following the Appropriate Assessment report it was recommended that further field survey work be undertaken to examine the numbers / location of roosting Golden Plover, Knot and Dunlin relative to trestles; notably to further examine recent trends

in site usage. A program of investigation was carried out whereby a series of tidal cycle monitoring of bird distribution (Grey Plover, Knot and Dunlin, Bar-tailed Godwit) within Whitehouse Bank, and bird movements onto/off Whitehouse Bank, across the tidal cycle. A monitoring regime targeted three monitoring days per month, during neap, mean and spring low tide. The monitoring period also covered the full duration of exposure of Whitehouse Bank. The outputs were used to inform licensing decisions at a number of locations in Dungarvan. On foot of the monitoring it was concluded that the presence of trestles (used in the culture) presented a physical barrier to the movement through the shore of Grey Plover. The output of this monitoring advised the restructuring of trestle configuration in the site which would be subject to ongoing monitoring in order to determine the effectiveness of this mitigation measure. The Department has prepared an Appropriate Assessment Conclusion Statement outlining how it is licensing aquaculture in this Natura site in compliance with the Birds Directive (available on the Department's website). A monitoring programme to measure the effectiveness of the creation of a 'bird corridor' in facilitating increased bird use of the area which commenced in September 2016 has been completed and a draft report has been prepared. This programme is being continued during the 2018/2019 season.

- Bannow Bay – a winter monitoring programme of monthly low tide counts was initiated in September 2017. The purpose of the programme is to provide greater confidence in shorebird count numbers for the site and to examine interaction between shorebird site usage and existing aquaculture (oyster culture) operations. This programme has continued through the 2018/19 season.
- Dundalk Bay - Monthly Oystercatcher counts between September - March have been completed annually since 2011. In addition, studies of the feeding behaviour and diet of Oystercatcher have been undertaken. Dundalk monitoring is primarily in response to the 5-year fishery plan for cockles, while the Donegal and Dungarvan programmes are specifically related to aquaculture (oyster trestle culture) activities.
- Shannon Estuary - Poulnasherry Bay (Co. Clare) - A monitoring programme (winter low tide counts) was initiated in this bay during 2018/19 to fully determine the current and ongoing status of shorebird species in this portion of the SPA, in light of recent aquaculture licensing decisions allied with other potential stressors (i.e. heavy macroalgal fouling).

Work Programme

In 2018, Appropriate Assessment reports were completed in respect of the Lower River Shannon SAC and River Shannon and Fergus Estuaries SPA, Ballyness Bay SAC, Rutland Island and Sound SAC and Castlemaine Harbour SAC and SPA (second Appropriate Assessment report) and in 2019 to date, the Carlingford Lough SPA and Carlingford Shore SAC Appropriate Assessment report has been produced. This essentially means that all bays with significant aquaculture have been appropriately assessed.

Continuing progress is being made in achieving aquaculture licensing determinations in Natura 2000 areas. The Department has put in place a two-year programme to eliminate the backlog of shellfish licence applications. This programme has involved the achievement of 305 licence determinations in 2018 and the Department is on target to achieve 300 further licence determinations in 2019.

5. Fisheries

Framework Legislation

The Common Fisheries Policy covers the conservation of marine biological resources and the management of fisheries and fleets exploiting such resources. In the context of managing sea-fisheries in Natura 2000 sites, Articles 2, 3, 11, 19 and 20 of the Common Fisheries Policy Regulation EU 1380/2013 are relevant:

Article 11.1 permits Member States to adopt conservation measures not affecting fishing vessels of other Member States that are applicable to waters under their sovereignty or jurisdiction and that are necessary for the purpose of complying with their obligations under (inter alia) Article 6 of Directive 92/43/EEC provided the measures are compatible with Article 2 (objectives of the Common Fisheries Policy), meet the objectives of the relevant Union legislation and are at least as stringent as measures under Union law.

Articles 11.2 to 11.6 set out specific procedures to address circumstances where other Member States have a direct management interest the fishery to be affected. Under those procedures, the Commission is empowered to adopt measures. In Ireland's case, this would apply to conservation measures which may affect a number of fisheries in the 6 to 12 nautical mile belt from Ireland's baselines and any fisheries beyond 12 nautical miles.

Article 19 permits Member States to adopt measures applicable solely to their own fleet and ascribes conditions for notifying other Member States concerned and making information publicly available.

Article 20 permits Member States to take non-discriminatory measures for the conservation and management of fish stocks and the maintenance or improvement of the conservation status of marine ecosystems within 12 nautical miles of its baselines provided that the Union has not adopted measures addressing conservation and management specifically for that area or specifically addressing the problem identified by the Member State concerned. The Member State measures must be compatible with the CFP objectives and be at least as stringent as measures under Union law.

Article 3 establishes the Principles of Good Governance for the CFP. Ireland must also have regard to these in adopting measures in accordance with Articles 11, 19 and 20.

The scope of measures which can be enacted under national law to control fishing activities is therefore limited by the Common Fisheries Policy in the first instance and national measures can only be applied on the basis set down above.

The principal national legislation for managing sea-fisheries under the Common Fisheries Policy is the Sea-Fisheries & Maritime Jurisdiction Act 2006. The Minister for Agriculture, Food and the Marine is responsible for making policy and regulations under this Act for a wide range of sea-fisheries including management of Ireland's quotas under the CFP and management of the majority of commercial sea-fishing activities (excluding certain species under the governance of the Minister for Communications, Energy and Natural Resources).

The Sea-Fisheries Protection Authority is established under the 2006 Act as an independent control and enforcement authority. Regulations issued under the 2006 Act set down national measures to comply with CFP regulations and avail of the scope given to Ireland as a Member State under Article 19 and 20 of the CFP Regulation; regulations may apply to the activities of Irish sea-fishing boats wherever they fish or to sea-fishing activities in waters within Ireland's jurisdiction, including within 12 nautical miles of Ireland's baselines.

The European Union (Birds and Natural Habitats) (Sea-Fisheries) Regulations 2013 (S.I. 290 of 2013 as amended by SI 565 of 2014) provide the Minister for Agriculture, Food and the Marine regulatory powers to manage sea-fisheries, consistent with the responsibilities conferred under the 2006 Act and permissible to Ireland as a Member State under the Common Fisheries Policy, specifically for the purpose of the Birds and Habitats Directives. The regulations apply to the regulation of sea-fishing activity in so far as the regulation of that activity is necessary to secure compliance with the Regulations of 2011 and the objectives of the Habitats Directive. The scope of the regulations is

neither constrained by nor specific to the length of sea-fishing boats.

Regulation 9 provides that the Minister may issue a declaration which will apply to sea-fishing activity which has the potential to impact on the conservation objectives of a European site. The circumstances in which the Minister may issue a Declaration are:

- to give effect to a Fisheries Natura Plan which has undergone appropriate assessment;
- in response to the conclusions of a risk assessment report prepared by the Marine Institute;
- in order to comply with Regulation 27 of the European Communities (Birds and Natural Habitats) Regulations 2011 or
- where there is an immediate and significant risk from sea-fishing to the conservation objectives of a European site.

A brief summary of S.I. 290 of 2013 is as follows:

- Regulation 3 provides for the submission of a Fisheries Natura Plan in relation to planned fisheries.
- Regulation 4 provides for a screening of a Fisheries Natura Plan to determine whether or not an appropriate assessment is required.
- Regulation 5 provides for an Appropriate Assessment of a Fisheries Natura Plan and also provides for public and statutory consultation.
- Regulation 6 provides for the Minister to make a determination to adopt a Fisheries Natura Plan. The Minister may amend, withdraw revoke a plan.
- Regulation 7 provides for publication of the adopted Fisheries Natura Plan.
- Regulation 8 provides for a Risk Assessment of unplanned fisheries and also provides for public and statutory consultation on the assessment.
- Regulation 9 provides for the issue of a Natura Declaration to prohibit, restrict including restricting by permit, control, etc. of sea-fishing activities.
- Regulation 10 provides for Natura Permits to be issued where required by Natura Declaration.
- Regulations 11 to 31 deal with functions of authorised officers and related matters, offences, etc.

The Declaration is the legal instrument which prescribes the measures for managing the risks posed by specific sea-fishing activities. The 2013 Sea-Fisheries Regulations identify offences including failure to comply with a Declaration (Regulation 25). The 2013 Sea-Fisheries Regulations set down the enforcement powers available to the Sea-Fisheries Protection Authority, consistent with the scope of powers available for sea-fisheries generally (Regulations 12, 13, 14, 15, 16, 17, 18).

Declarations which are in place for a number of areas are available online at:

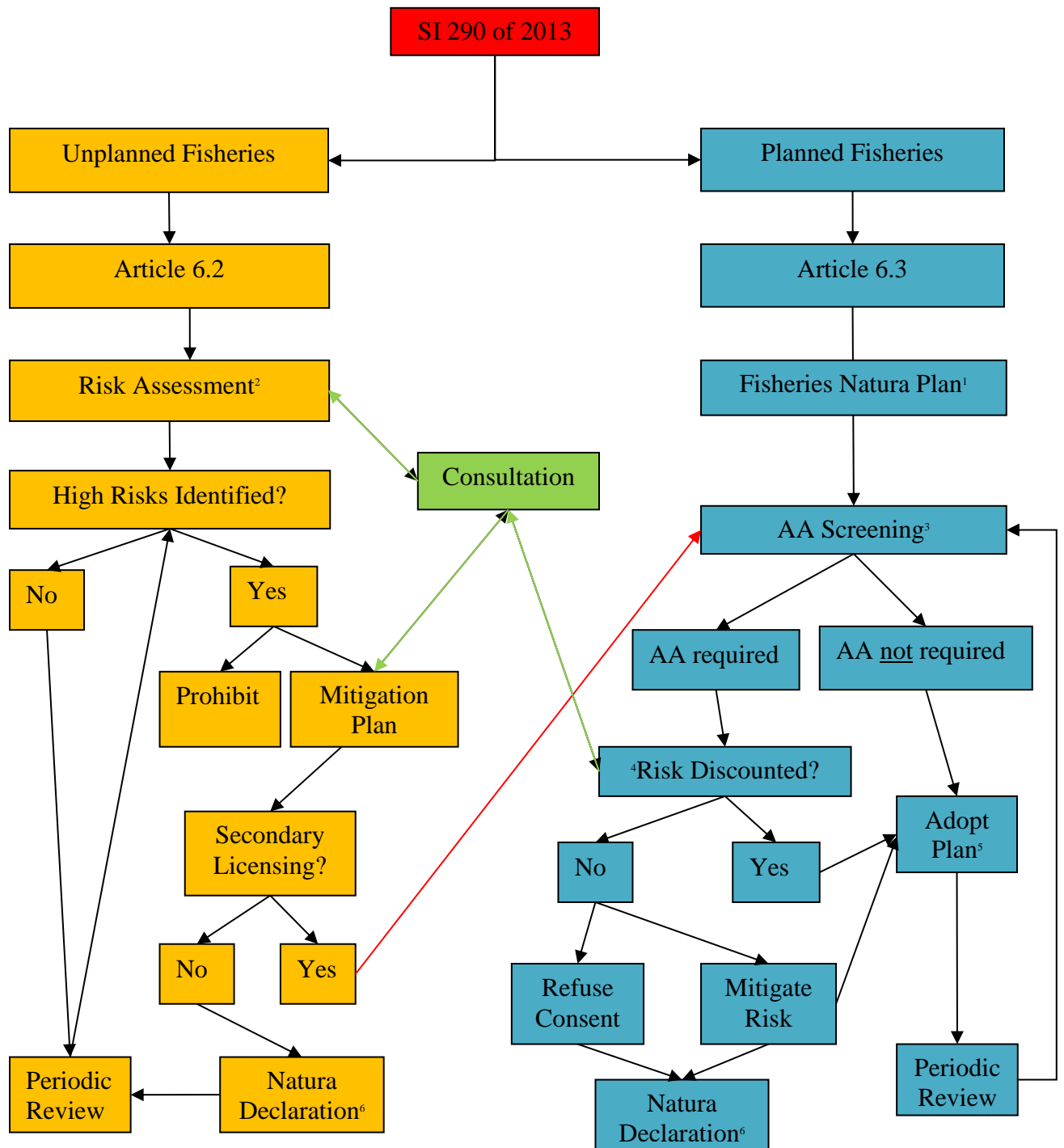
<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/natura2000sitesundermanagement/>

Procedures operated in relation to sea-fisheries in Natura 2000

The procedures operated by the Department are published at the following link:

<http://www.fishingnet.ie/media/fishingnet/content/fisheriesinnaturaareas/siteassessments/proceduresandmethodology/NATURA%202000%20procedures%2011-9-2013.pdf>

These procedures are illustrated overleaf.



Explanatory Notes

1. A Fisheries Natura Plan is prepared in accordance with Regulation 3 SI 290 of 2013
2. Risk Assessment of unplanned fisheries under Regulation 8 SI 290 of 2013
3. Screening for appropriate assessment under Regulation 4 SI 290 of 2013
4. Appropriate Assessment under Regulation 5 and Ministerial Determination under Regulation 6 of SI 290 of 2013
5. Adoption of a Fisheries Natura Plan under Regulation 6 SI 290 of 2013. Plan may be modified.
6. Natura Declaration made under Regulation 9 SI 290 of 2013 regulating fishing.

Profiling of industry activity

For planned fisheries (art. 6.3), profiling of fishing activity is twofold. Operators quantify and map their proposed activity in their Fisheries Natura Plan. This is the plan submitted for appropriate assessment. Additional profiling is done using logbook data, VMS data, Marine Institute survey data and expert opinion resulting in maps showing the distribution of shellfish resources.

For unplanned fisheries (art 6.2), profiling is done using logbook data, VMS data, expert opinion, Marine Institute survey data to show the distribution of shellfish resources, supplemented by questionnaire surveying of selected fishermen.

Fishery profiling was completed for all Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) in 2013.

Article 6 Assessments

As the roadmap indicated, and as agreed with the Commission, planned fisheries were to be assessed under Article 6.3 (appropriate assessment).

Following communications and discussions with the Commission in 2012 and 2013, and in order to fulfil the obligations arising under article 6.2 in relation to all activities, planned or unplanned, a Risk Assessment Framework and Work Programme were put in place in 2013. The Risk Assessment programme seeks to establish scientifically, and in accordance with Commission guidance, the degree of risk, if any, posed by each type of fishing activity on the designated habitats and species in each site. Where significant risk is identified, mitigation measures are implemented. The Department is continuing to give priority to bringing the management of inshore fisheries into full compliance with the Habitats and Birds Directives and with the judgment of the European Court of Justice in case C418/04.

Appropriate Assessments

Article 6.3 appropriate assessments are required prior to fisheries in Natura 2000 areas that are licensed (via fishing authorisations). Such assessments require detailed information on the operation of the particular activity to be licensed in order to carry out the assessment. However, many sea-fishing activities are not subject to specific fishing authorisation requirements, and detailed data is unavailable for appropriate assessments. Appropriate Assessments have been carried out for Castlemaine Harbour (mussel seed), Dundalk Bay (cockles) and the Irish Sea (mussel seed fishery, taking in 44 Natura sites).

The Dundalk cockle fishery operates under the terms of the Fisheries Natura Plan 2016 – 2020 and is subject to regulatory measures put in place under Fisheries Natura Declaration No. 1 of 2016. Annual reviews of the environmental performance of the fishery are prepared and reviewed as part of the permitting decision process. The fishery did not open in 2014 based on a decision of the Dundalk cockle fishermen as the stock level was not significantly above the limit reference point. The fishery remained closed in 2015 due to low stock biomass but reopened in 2016 for vessels with permits issued to operators which held track record in the fishery. Hand gathering permits were not issued for 2016 due to concerns raised by the SFPA about the compliance of hand gatherers with permit conditions during the operation of the previous Fisheries Natura Plan. The permitting of a cockle hand-gathering fishery may be considered in the future. However, in order to revisit the current position, it would be important that those interested in participating in a cockle hand-gathering fishery develop a considered proposal to allay the compliance concerns. <http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/dundalkbay-sacspa/#d.en.72078>

An appropriate assessment of the mussel seed fishery in the Irish Sea (participation in the mussel fishery requires authorisation) was concluded in 2018 and a new Fisheries Natura Plan (2018-2022) was adopted. The fishery took place in 2018 under Fisheries Natura Declaration No. 3 of 2018, which restricts the fishery in accordance with the outcome of the new assessment. The measures

involve prohibiting seed mussel fishing in certain Natura 2000 sites, including sites not yet assessed that are closed on a precautionary basis. Seed mussel fishing is also excluded from the reef habitats in a number of Natura 2000 sites. Fishing for seed mussel in intertidal areas is excluded until more detailed fishing management plans for this activity are developed and can be assessed.

<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/irishsea-includingmusselseedfishery/#d.en.72197>

After remaining closed in 2013 due to lack of suitable seed, the mussel seed fishery in Castlemaine Harbour opened again for the 2014 and 2015 fisheries following survey assessments of the available seed biomass. The fishery remained closed again in 2016 due to lack of suitable seed. A new Fisheries Natura Plan (2016-2023) for the fishery in Castlemaine Harbour was adopted in 2017 following an appropriate assessment process. The fishery took place again in 2017 and 2018, following survey assessments of the available seed biomass. A Fisheries Natura Declaration limits the fishing of mussel seed in Castlemaine Harbour to operators holding a Fisheries Natura Permit for the fishery.

<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/castlemaineharbour-sacspa/#d.en.72077>.

Risk Assessments

In the December 2013 programme of measures, Ireland aimed to complete risk assessments for all sites (approx 158) by the first quarter of 2014. A risk assessment for ‘unplanned’ fisheries in the Irish Sea, from Carnsore to Carlingford, which takes in 44 Natura sites, underwent public consultation in 2013. Mitigation proposals for sites off the Wexford coast underwent consultation during mid 2014 and implementation commenced December 2014. Documents can be viewed here:

<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/natura2000sitesundermanagement/wexford-rosslareandcahore/>.

The assessment of Roaringwater Bay was revised from an Article 6.3 to a 6.2 assessment during 2013. The proposed mitigation responses arising from the risk assessment of fishing activities in Roaringwater Bay underwent public consultation in Q4 2013. Following subsequent modifications to the mitigation responses, direct consultation was held with representatives of the local fishing industry during 2014. A Fisheries Natura Declaration is now in place to give legal effect to regulatory measures. Details of the mitigation plan and the Declaration can be viewed here: <http://www.fishingnet.ie/sea-fisheriesinnaturaareas/natura2000sitesundermanagement/roaringwaterbay/>.

The assessments for all other SACs (habitats and species taking in the remaining coastline from Wexford to Donegal) were completed in 2014 using the available conservation objectives and have been the subject of workshops with the relevant State bodies to ensure that all available data is correctly taken into account. These assessments have now been updated in line with the progress made on publishing Specific Conservation Objectives for all marine SACs. An assessment for all other SPAs (birds) is being undertaken separately by the Marine Institute. This is currently being drafted and is expected to be completed in Q2 of 2019.

Due to the volume of sites and the range of fisheries involved in the SAC and SPA risk assessments, it is considered necessary to prioritise the development of mitigation measures in relation to the level of estimated risk. A prioritisation exercise and report was completed and discussed at stakeholder consultation meetings during 2015 along with the updated SAC assessment report. The same prioritisation exercise will follow for the SPA risk assessment in Q3 of 2019. Mitigation of high risk scenarios have been implemented or are being developed. An important issue is that fisheries data is generally not available at a sufficiently fine resolution relative to the scale and size of habitat features. In order to improve the provision of data on the

interaction between fisheries and habitat and species features, the Inshore Management Group (which includes the Department and three marine agencies – the Marine Institute, Bord Iascaigh Mhara, Sea-Fisheries Protection Authority) agreed to initiate a trial of the use of Global Positioning System (GPS) monitoring technology on sea-fishing boats. The trial has been carried out by the Marine Institute since 2014. The trial uses technology and processes for monitoring the activity of fishing boats similar to methods envisioned in the European Commission’s published proposal for a revised Control Regulation for fisheries which proposes to require electronic monitoring and catch reporting for all commercial sea-fishing boats. (<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018PC0368>) Sea-fishing boats are currently required by regulations and Fisheries Natura Declarations to carry an approved GPS monitoring system when participating in particular fisheries or fishing in certain areas with specified fishing gear. For instance, regulations were introduced in June 2015 to oblige all boats exploiting razor clams to carry fully-functioning GPS monitoring systems on board so that (inter alia) the footprint of these fisheries can be monitored and managed with regard to its potential impact on the features of Natura 2000 sites. (<http://www.irishstatutebook.ie/eli/2015/si/206/made/en/print>) Boats fishing for scallop in Blacksod Bay also must carry a GPS monitoring system under a Fisheries Natura Declaration introduced in 2015. Other Fisheries Natura Declarations, introduced in 2015 and 2017 respectively, require boats fishing by means of certain dredge and trawl gear to carry a GPS monitoring system if they are operating in Roaringwater Bay or in the Hook Head and Saltee Islands SACs.

[http://www.fishingnet.ie/sea-](http://www.fishingnet.ie/sea-fisheriesinnaturaareas/natura2000sitesundermanagement/blacksodbay/)

[fisheriesinnaturaareas/natura2000sitesundermanagement/blacksodbay/](http://www.fishingnet.ie/sea-fisheriesinnaturaareas/natura2000sitesundermanagement/blacksodbay/)

[http://www.fishingnet.ie/sea-](http://www.fishingnet.ie/sea-fisheriesinnaturaareas/natura2000sitesundermanagement/roaringwaterbay/)

[fisheriesinnaturaareas/natura2000sitesundermanagement/roaringwaterbay/](http://www.fishingnet.ie/sea-fisheriesinnaturaareas/natura2000sitesundermanagement/roaringwaterbay/)

[http://www.fishingnet.ie/sea-](http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/hookheadandsalteeislands-sac/)

[fisheriesinnaturaareas/concludedassessments/hookheadandsalteeislands-sac/](http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/hookheadandsalteeislands-sac/)

Fishing for scallop in Blacksod Bay was regulated in Q3 of 2015. The use of mobile fishing gears on sensitive reef habitat in Blacksod Bay was prohibited, and boats fishing scallop in the rest of the bay are obliged to carry GPS monitoring systems on board (Fisheries Natura Declaration No. 3 of 2015). In December 2018, the Marine Institute made the Department aware of extensive damage to protected maerl habitats in Blacksod SAC which the Institute documented in a report. The Sea-Fisheries Protection Authority was informed of the damage and it, in turn, informed the main representative groups in the area of the issue. A representative from the Marine Institute delivered a presentation on the reef damage at a meeting of the North West Regional Inshore Fisheries Forum (NWRIFF) in January 2019 and reported that there had been no argument from attendees that fishing had caused the damage and concern was expressed to ensure that such damage did not recur. At a meeting of the National Inshore Fisheries Forum on 31 January 2019, the Minister made it clear that he may take additional measures to protect this site. A voluntary cessation of dredging activity was agreed to at a NWRIFF meeting in February 2019 until such time as a mitigation plan was in place. A group was formed, consisting of fishing representatives in Blacksod Bay, and tasked with drawing up this plan. The reef damage is referenced in the recent draft Article 17 Habitats Directive Report of April 2019. (https://www.npws.ie/sites/default/files/files/Art_17_SPECIES_DRAFT_VOLUME.pdf) Licencing of dredges in relation to wild oyster fishing, which occurs in the bay, is a matter for Inland Fisheries Ireland (IFI), which is under the aegis of the Department of Communications, Climate Action and Environment. Industry committed to following up with IFI with a view to getting bye-laws in place to limit where oyster fishing occurs in Blacksod. The Marine Institute advised it was also in contact with IFI about oyster bye-laws for habitat protection generally.

[http://www.fishingnet.ie/sea-](http://www.fishingnet.ie/sea-fisheriesinnaturaareas/natura2000sitesundermanagement/blacksodbay/)

[fisheriesinnaturaareas/natura2000sitesundermanagement/blacksodbay/](http://www.fishingnet.ie/sea-fisheriesinnaturaareas/natura2000sitesundermanagement/blacksodbay/)

The Marine Institute’s 2013 Article 6.3 assessment for the Irish Sea identified potential impacts the Wexford razor clam fishery could have on nearby Natura sites. A mitigation response plan was

developed for the fishery, taking into account the assessed risks. It proposed new and revised management measures to mitigate the fishery's potential impacts on nearby Natura sites. It was published in Q2 2014 as part of a public consultation. On the basis of submissions received, and advice from the various marine agencies, the Minister in December 2014 approved a package of measures for this fishery. Key mitigation measures introduced for the fishery include reporting obligations (including GPS tracking of vessels) to monitor activity adjacent to Natura 2000 sites and spatial limits on the distribution of the fishery.

A risk mitigation response plan for the Wexford Scallop fishery is completed. As part of the process, a public consultation on the plan was carried out in 2016. A new Fisheries Natura Declaration was introduced in 2017. The Declaration introduced restrictions on the use of dredging and trawling fishing gear in the Hook Head and Saltee Islands SACs, including prohibiting the use of this gear in some areas and closing other areas to fishing with such gear for nine months each year. It also introduced GPS monitoring of certain fishing boats carrying dredging and trawling fishing gear in the Hook Head and Saltee Islands SACs.

<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/hookheadandsalteeislands-sac/>

A draft risk mitigation response plan is being developed for Clew Bay. The plan seeks to reduce the risks posed by mobile bottom towed fishing gears to habitats in the bay. The risk mitigation proposals have been developed by the Marine Institute through consultation with industry in 2018.

Completed Appropriate Assessments⁶

- River Barrow and River Nore (Waterford Estuary) (1 site) (planned surf clam dredge fishery) – AA screening out
<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/barrownorewaterfordestuary-clamfishery-sac/#d.en.72196>
- Dundalk Bay (2 sites) (2011) (planned cockle and mussel seed dredge fisheries)
<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/dundalkbay-sacspsa/#d.en.72078>
- Castlemaine Harbour (2 sites) (2011) (planned mussel seed dredge fishery)
<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/castlemaineharbour-sacspsa/#d.en.72077>
- Lough Swilly (2 sites) (2013) (planned oyster dredge fishery)
<http://www.agriculture.gov.ie/fisheries/aquacultureforeshoremanagement/aquaculturelicensing/appropriateassessmentscarriedout/loughswillyappropriateassessment/>
- Irish Sea (6 sites) (Aug 2013) (planned mussel seed dredge fishery)
<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/irishsea-includingmusselseedfishery/#d.en.72197>

Completed Risk Assessments

- Roaringwater Bay (SAC) (2013) (all unplanned fisheries)

⁶ Appropriate assessment includes screening for appropriate assessment

- <http://www.fishingnet.ie/sea-fisheriesinnaturaareas/natura2000sitesundermanagement/roaringwaterbay/>
- Donegal Bay (SAC & 2 SPA's)
<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/donegalbay-sac2spas/#d.en.72195>
 - Irish Sea (24 SACs and 20 SPAs)(all unplanned fisheries)
<http://www.fishingnet.ie/sea-fisheriesinnaturaareas/concludedassessments/irishsea-includingmusselseedfishery/#d.en.72197>
 - South & West Coasts (37 SACs)(all unplanned fisheries)
(Marine Institute 2015. Article 6.2 (Habitats Directive) risk assessment. The effects of fisheries on qualifying interests in Special Areas of Conservation in Irish coastal waters. Marine Institute, 356pp.)

Managing the risk of escalation of new activities

Article 6.2 of the Habitats Directive aims to avoid deterioration of habitats and species that could result from human activities and the risk assessment process is integral to identifying the likelihood of these effects occurring. Potential new fisheries, especially dredge fisheries for bivalves, that might develop under existing fisheries arrangements have been included in the risk assessment report.

Harvesting of live bivalve shellfish can only take place in production areas which have been classified by the competent authority (the Sea-Fisheries Protection Authority in Ireland's case) in accordance with Regulation (EC) No. 854/2004. To prevent unmanaged escalation of new bivalve fisheries, new protocols for their management have been drafted and discussed with the Regional Inshore Fisheries Forums. This protocol defines the conditions under which new fisheries could develop so that they are sustainably managed and do not cause deterioration of habitats or species. These conditions are developed as part of the decision (by Ireland's Sea-Fisheries Protection Authority) to classify production areas and further assessed (stock assessment, detailed mapping of the proposed fishing area) by Marine Institute once a decision has been made to classify. During the minimum 6 month period needed to classify such areas the authorities develop management measures with the industry in response to risks (including risk of overexploitation of the target species) identified in the Marine Institute assessments.

By way of example of this new approach, a limited fishing period for razor clams was facilitated at Inishkea Islands in early 2016 following a stock survey and taking account of the risk assessment outcome of dredge activities on the Natura 2000 site. On reaching the recommended outtake, a statutory instrument was introduced to curtail further fishing. This instrument was revoked in the latter part of the year after a local management arrangement was agreed with fishermen and their representatives. The fishery took place again in 2017 on the basis of these agreed voluntary management measures.

Consultation and publication of information

Stakeholder involvement in considering assessments and designing mitigation has been reviewed to ensure consistency with both the Common Fisheries Policy and the Aarhus Convention. In May 2014, the Minister announced the establishment of a National Inshore Fisheries Forum to provide inshore fishing communities with their own space for convening and bringing common initiatives forward. A network of Regional Inshore Fisheries Forums, based on and linked to the six community-led Fisheries Local Action Groups (FLAGs) around the Irish coast, have nominated delegates to the National Inshore Fisheries Forum to bring forward regional proposals to that body for wider industry discussion. The purpose of the Inshore Fisheries Forums is primarily to develop and facilitate implementation of policies and initiatives relating to the sustainable

management of the inshore fisheries within six nautical miles; this will include consideration of relevant fisheries management measures for Natura 2000 sites.

While the Inshore Fisheries Forums are primarily aimed at developing a stakeholder group for inshore fishermen, up to one third of the membership of the Regional Inshore Fisheries Forums also comprise other marine stakeholders including environmental interest groups. The Inshore Fisheries Forums are not intended to replace statutory and wider public consultation. Each of the 6 Regional Inshore Fisheries Forums has been briefed on Natura 2000. Presentations including case studies and progress updates have also been given at the National Inshore Fisheries Forum meetings (January and April 2015). A programme of risk mitigation planning is now underway and as a first step the Regional Inshore Fisheries Forums received information on interactions relevant to their areas during Q2-Q3 2015 so that risk mitigation strategies can be developed with appropriate stakeholders. The Inshore Fisheries Forums have also been engaged on the measures being prepared to prevent escalation in unmanaged bivalve sea-fisheries.

S.I. 290 of 2013 provides in Regulation 5 for a mandatory process of inter-service and public consultation on the fisheries elements of an appropriate assessment and on the related Fisheries Natura Plan which was the subject of that appropriate assessment. Note that the Fisheries Natura Plans are drafted in the first instance by fishing interests and so are privately drafted plans.

Regulation 8 similarly provides for consultation on article 6.2 risk assessment reports.

Stakeholders are required to be given one month to make submissions in both cases.

A response is provided to each submission addressing all relevant issues raised in the submission. These are published on the Department's fishingnet.ie website.

In accordance with the requirements of S.I. 477 of 2011, the Minister's determination on a planned fishery and related appropriate assessment is published on the Department's website, setting out the reasons for the Minister's decision on the plan.

The Department's website for fisheries in Natura 2000 sites was re-designed in 2013 to present all information relevant to the Department's functions in this area, including all legislation, guidance, plans, assessment reports, Determinations, Fisheries Natura Declarations, template Fisheries Natura Permits and periodic review reports. See <http://www.fishingnet.ie/sea-fisheriesinnaturaareas/>.

The Regional Inshore Fisheries Forums and National Inshore Fisheries Forum provide an additional platform for direct stakeholder consultation on risk assessment, appropriate assessment and mitigation planning.

Licensing following appropriate assessment

S.I. 290 of 2013 provides for the making of legal instruments called Fisheries Natura Declarations following appropriate assessment/risk assessment. A comprehensive range of regulatory interventions can be implemented through Fisheries Natura Declarations, including prohibitions on fishing activity and restriction of fishing by permitting regimes.

Appropriate assessments were completed in 2017 for Castlemaine Harbour SAC/SPA, in 2016 of Dundalk Bay SAC/SPA and in 2018 for Irish Sea sites. Fisheries Natura Declarations were issued for each fishery enforcing conditions of fishing.

In respect of Castlemaine Harbour SAC/SPA, the Fisheries Natura Declaration restricts mussel seed fishing in the harbour to holders of Fisheries Natura Permits. Permits in turn restrict fishing

to defined coordinates and imposed catch limits in order to preserve a percentage of the mussel biomass for over-wintering birds.

Likewise, the Fisheries Natura Declaration for Dundalk Bay imposes a minimum landing size for cockles, restricts cockle fishing to holders of Fisheries Natura Permits, for both dredge fishing and hand raking from the shore, and specifies mechanisms for triggering closure of the fishery to preserve a percentage of cockles for over-wintering birds. Fishing for cockles did not take place during 2014 or 2015. Permits were only issued to vessels for cockle fishing in Dundalk Bay for 2016, 2017 and 2018. As there was evidence of poor compliance amongst hand gatherers in recent years, no permits were issued for this activity in these years.

The Fisheries Natura Declaration in relation to fishing for mussel seed in the Irish Sea sites prohibits seed mussel fishing in certain Natura 2000 sites, including sites not yet assessed that are closed on a precautionary basis. Seed mussel fishing is also excluded from the reef habitats in a number of Natura 2000 sites. Fishing for seed mussel in intertidal areas is excluded until more detailed fishing management plans for this activity are developed and assessed.

Monitoring and control following licensing

For each Natura 2000 site within which a fishery was opened following appropriate assessment, a requirement was put in place for Periodic Reviews. These reviews consider if any circumstances have changed that may warrant an amendment to the related Fisheries Natura Plan or the appropriate assessment report. Management arrangements are reviewed to ensure that the Fisheries Natura Plan continues to have no adverse effects on the Natura 2000 sites concerned. Reviews were completed in 2012 and 2013 and were published online at <http://www.fishingnet.ie>, the Government's commercial sea-fishing network portal. In due course, reviews will be carried out and published under the new Fisheries Natura Plans for Dundalk Bay and Castlemaine Harbour. Dundalk cockle biomass estimates and the previous year's fishery are updated and reviewed annually in the Marine Institute Shellfish Review. This also periodically includes data on wading birds and benthic indicators.

In addition, in relation to the fishery opened following appropriate assessment, a unique and comprehensive fishery control plan was drafted by Ireland's Sea-Fisheries Protection Authority. In Castlemaine Harbour, each vessel active in the fishery was required to operate an onboard vessel positioning system, which continuously reported the vessel's position within the site and on the seed bed external to the site. Each vessel was required to make requisite returns using gatherers docketts and logbook records of quantities of seed taken onboard and re-laid.

In Dundalk Bay for 2013, 2016, 2017 and 2018, the number of vessels fishing cockles was restricted by Fisheries Natura Permits. Each vessel was required to make returns showing the time, location, the gross catch and the permit number. For 2013, hand gatherers active in this fishery were issued Fisheries Natura Permits and required to complete gatherers docketts for any cockle taken. Inspections by Sea-Fisheries Protection Authority officers took place throughout the period of the fishery. Due to evidence of poor compliance amongst hand gatherers, no such Fisheries Natura Permits were issued in 2016, 2017 or 2018. No cockle fishing took place in Dundalk Bay in 2014 or 2015.

In the Irish Sea mussel seed fishery, participating vessels are prohibited from the sensitive reef habitat of the Wicklow Reef SAC. A geo-fenced buffer zone was imposed around the closed area and vessels fishing for mussel seed in the buffer zone are required to report their position through a Vessel Monitoring System (VMS) every 5 minutes.

Post Assessment Monitoring Activities

Findings of non-significant effects during appropriate assessment can be derived with different levels of confidence. Where the level of confidence in findings was not high and where the

consequences of ‘getting it wrong’ could be significant targeted environmental monitoring programmes were put in place. The two appropriate assessments that were completed in Dundalk Bay and Castlemaine Harbour were followed by extensive effects monitoring programmes. Outputs include:

- Assessment of the potential effects of cockle harvesting in Dundalk Bay on shorebirds, the aim of which was to examine the effect of cockle fishing on waterbird utilisation of intertidal habitat in Dundalk Bay. Results of this study are available at <http://www.fishingnet.ie/media/fishingnet/content/fisheriesinnaturaareas/siteassessments/dundalkbay/AA%20Annex%20IV%20waterbirds%20and%20cockles.pdf>
- Monitoring of Oystercatcher numbers, spatial distribution & diet in Dundalk Bay SPA (2011 - 2013) the aim of which is to monitor numbers of Oystercatcher at Dundalk to quantify the composition of the diet of the Dundalk Bay Oystercatcher population and to use these data to inform the licensing of a cockle fishery in the bay. Wading bird monitoring data is regularly updated and related to cockle biomass and fishery outtakes.
- Before after control impact (BACI) effects monitoring of hydraulic dredging for cockles on the intertidal benthic habitats of Dundalk Bay in 2009 and 2010. This study looked for effects of hydraulic dredging for cockles on benthos using a control impact before after experimental design. The report is available from the Marine Institute.
- Annual monitoring of bivalve distribution and abundance in Dundalk Bay 2010-2012. Annual surveys are conducted to detect any changes in distribution or abundance of characterising bivalves in the bay which supports a cockle fishery. Reports are available from the Marine Institute.
- Impact of dredging on undersized discard cockle and bivalves; a study was completed in Dundalk Bay prior to the opening of the 2013 fishery.
- Annual monitoring of mussel cover on intertidal marine habitats in Castlemaine Harbour using aerial imagery. This is discontinued due to the low level of mussel relay activity at the site in recent years.
- Monitoring distribution of seabirds by aerial survey in coastal waters of the western Irish Sea in relation to inshore dredge fisheries for bivalves. Two surveys were completed by contractors to the Marine Institute in March and December 2014.
- Original research on the potential effects of using static fishing gears (pots) on seagrass, maerl and Laminaria reef was completed in 2015.

Work programme 2019

Risk assessment of fisheries in SPAs will be completed by Q2 of 2019. The Marine Institute has advised the data compiled to date does not show any high priority risk to special conservation interests (SCIs) in SPAs from inshore fisheries activities other than in the case of intertidal fisheries for bivalves. Such effects are already managed in Dundalk Bay and Castlemaine Harbour. There are protocols in place that curtail the development of intertidal bivalve fisheries unless fishery plans are developed and which show compliance with conservation objectives for SACs and SPAs. These protocols essentially prohibit the development of new bivalve fisheries unless particular protocols are followed which include compliance with food safety regulations, risk assessment for Natura 2000 features and measures for the target species that would ensure sustainable levels of exploitation.

New research, funded by the European Maritime and Fisheries Fund (EMFF) programme, in support of recovery or management of Natura 2000 features:

- Habitat assessment and ocean modelling for restoration of native oyster and its habitat (SACs/SPAs: Galway Bay, Lough Swilly). Native oyster (*Ostrea edulis*) is a characterising species of sedimentary habitats in a number of SACs in Ireland and has the potential to develop into reef features. The species is depleted in many areas however due to a combination of factors including freshwater inflows, disease and over fishing. A new project is investigating ways to restore this species. Both the fishing and aquaculture industry are involved working through local community organisations with Marine Institute scientific direction. In 2018 baseline survey work and small scale trials to enhance spat settlement were completed. Spat settlement trials using oyster and mussel shell will be scaled up in 2019.
- High resolution physical and biological mapping of crayfish reef habitat. Crayfish (*Palinurus elephas*) is an emblematic and keystone species of reef habitat in coastal waters. This project is mapping reef habitat from acoustic data (multibeam) and providing high resolution biological data for patches of reef habitat which is essential habitat for crayfish. These data will inform future measures for the protection of reef.
- Regional scale mapping of coastal habitats, wildlife populations and marine industry pressures using aerial survey. Monthly aerial surveys of seabirds were completed during the winter of 2018/19 in the western Irish Sea to investigate the interaction of small scale coastal fisheries and seabird populations in these areas and with particular emphasis on Common Scoter which is a qualifying interest in Dundalk Bay SPA. These data in combination with previous work on benthic fauna of the north Irish Sea exposed to hydraulic dredging for razor clams and also the high resolution data on GPS for this fishing fleet will be used to advise on mitigations for the Dundalk Bay SPA and other Natura 2000 areas in the Irish Sea in 2019.

Annex 1
Appropriate Assessment and Risk Assessment of Sea-Fisheries

The following is a schedule of completed and planned Appropriate Assessments and Risk Assessments for Sea-Fisheries.

Fisheries - Article 6 Assessment Status			
Sites	Designation	Appropriate Assessment⁷	Risk Assessment
Castlemaine Harbour	SPA	Complete	-
Castlemaine Harbour SAC	SAC	Complete	-
Dundalk Bay	SAC	Complete	-
Dundalk Bay	SPA	Complete	-
Roaringwater Bay and Islands	SAC	-	Complete
Donegal Bay (Murvagh)	SAC	-	Complete
Donegal Bay	SPA	-	Complete
Donegal Bay (Durnesh Lough)	SPA	-	Complete
Loughswilly	SAC	Complete	-
Lough Swilly	SPA	Complete	-
Baldoyle Bay	SAC	-	Complete
Blackwater Bank	SAC	Complete	Complete
Boyne Coast and Estuary	SAC	-	Complete
Bray Head	SAC	-	Complete
Buckroney-Brittis Dunes and Fen	SAC	-	Complete
Cahore Polders and Dunes	SAC	-	Complete
Carlingford Shore	SAC	-	Complete
Carlingford Lough	SPA	-	Complete
Clogher Head	SAC	-	Complete
Kilmuckridge-Tinnaberna Sandhills	SAC	-	Complete
Kilpatrick Sandhills	SAC	-	Complete
Lambay Island	SAC	-	Complete
Long Bank	SAC	Complete	Complete
Magherabeg Dunes	SAC	-	Complete
Malahide Estuary	SAC	-	Complete
North Dublin Bay	SAC	-	Complete
Raven Point Nature reserve	SAC	-	Complete
Rockabill to Dalkey	SAC	Complete	Complete
Rogerstown Estuary	SAC	-	Complete
Slaney River Valley SAC	SAC	-	Complete
South Dublin Bay	SAC	-	Complete
The Murrough Wetlands	SAC	-	Complete
Wicklow Reef	SAC	Complete	Complete
Baldoyle Bay	SPA	-	Complete
Boyne Estuary	SPA	-	Complete

⁷ 'appropriate assessment' includes screening for appropriate assessment

Cahore Marshes	SPA	-	Complete
Dalkey Island	SPA	-	Complete
Howth Head Coast	SPA	-	Complete
Irelands Eye	SPA	-	Complete
Lambay Island	SPA	-	Complete
Malahide Estuary	SPA	-	Complete
North Bull Island	SPA	-	Complete
River Nanny estuary and Shore	SPA	-	Complete
Rockabill	SPA	Complete	Complete
Rogerstown estuary	SPA	-	Complete
Skerries Islands	SPA	-	Complete
South Dublin Bay and River Tolka Estuary	SPA	-	Complete
The Murrough	SPA	-	Complete
The Raven	SPA		Complete
Wexford Harbour and Slobs	SPA	-	Complete
Wicklow Head	SPA	Complete	Complete
Carnsore Pt	SAC		Complete
Saltees Is	SPA		Complete
Hook Head	SAC		Complete
Achill Head	SAC	-	Complete
Akeragh, Banna and Barrow Hbr	SAC	-	Complete
Aran Island (Donegal) cliffs	SAC	-	Complete
Ardmore Hd	SAC	-	Complete
Ballinskelligs Bay and Inny Estuary	SAC	-	Complete
Ballyhoorisky Point to Fanad Head	SAC	-	Complete
Ballymacoda (Clonpriest and Pillmore)	SAC	-	Complete
Ballyness Bay	SAC	-	Complete
Ballysadare Bay	SAC	-	Complete
Ballyteigue Burrow	SAC	-	Complete
Bannow Bay	SAC	-	Complete
Barley Cove to Ballyrisode Pt	SAC	-	Complete
Black Hd Poulisallagh Complex	SAC	-	Complete
Blackwater River (Cork/Waterford)	SAC	-	Complete
Basket Islands	SAC	-	Complete
Broadhaven Bay	SAC	-	Complete
Bunduff Lough and Machair/Trawalua/Mullaghmore	SAC	-	Complete
Carrowmore Dunes	SAC	-	Complete
Carrowmore Point to Spanish Point and Islands	SAC	-	Complete
Clew Bay complex	SAC	-	Complete
Clonakilty Bay	SAC	-	Complete
Courtmacsharry Estuary	SAC	-	Complete
Cummeen Strand/Drumcliff Bay (Sligo Bay)	SAC	-	Complete
Durnesh Lough	SAC	-	Complete

Duvillaun Islands	SAC	-	Complete
Galway Bay complex	SAC	-	Complete
Glengarriff Hbr and Woodland	SAC	-	Complete
Great Island Channel	SAC	-	Complete
Gweedore Bay and Islands	SAC	-	Complete
Helvick Head	SAC	-	Complete
Hempton's Turbot Bank	SAC	-	Complete
Horn Head and Rinclevan	SAC	-	Complete
Inagh River estuary	SAC	-	Complete
Inisboffin and Inishark	SAC	-	Complete
Inismaan Island	SAC	-	Complete
Inismore Island	SAC	-	Complete
Inisoir Island	SAC	-	Complete
Inistrahull	SAC	-	Complete
Kenmare River	SAC	-	Complete
Kerry Hd shoal	SAC	-	Complete
Kilkee reefs	SAC	-	Complete
Kilkieran Bay and Islands	SAC	-	Complete
Killala Bay/Moy Estuary	SAC	-	Complete
Kingstown Bay	SAC	-	Complete
Lackan Saltmarsh and Kilcummin Hd	SAC	-	Complete
Lough Hyne Nature reserve and Environs	SAC	-	Complete
Lower River Shannon	SAC	-	Complete
Magharee Is	SAC	-	Complete
Mullet/Blacksod Bay complex	SAC	-	Complete
Mulroy Bay	SAC	-	Complete
North Inishowen Coast	SAC	-	Complete
Omey Island machair	SAC	-	Complete
Rathlin O'Beirne Island	SAC	-	Complete
River Barrow and River Nore	SAC	Complete	Complete
Rutland Island and Sound	SAC	-	Complete
Saltee Islands	SAC	-	Complete
Sheephaven	SAC	-	Complete
Slieve Tooy/Tormore Island/Loughros Beg Bay	SAC	-	Complete
Slyne Hd Islands	SAC	-	Complete
Slyne Hd peninsula	SAC	-	Complete
St. Johns Point	SAC	-	Complete
Streedagh Point Dunes	SAC	-	Complete
Tacumshin Lake	SAC	-	Complete
Tory Island coast	SAC	-	Complete
Tralee Bay and Magharees Peninsula	SAC	-	Complete
Tramore Dunes and Backstrand	SAC	-	Complete
Valentia Hbr/Portmagee Channel	SAC	-	Complete
West Connacht Coast_north	SAC	-	Complete
West Connacht Coast_south	SAC	-	Complete

West of Ardara/Maas Road	SAC	-	Complete
Ardboline Island and Horse Island	SPA	-	Q2 2019
Aughris Head	SPA	-	Q2 2019
Baera Peninsula	SPA	-	Q2 2019
Ballycotton Bay	SPA	-	Q2 2019
Ballymacoda Bay	SPA	-	Q2 2019
Ballysadare Bay	SPA	-	Q2 2019
Ballyteigue Burrow	SPA	-	Q2 2019
Bannow Bay	SPA	-	Q2 2019
Bills Rock	SPA	-	Q2 2019
Blacksod Bay/Broadhaven Bay	SPA	-	Q2 2019
Blackwater Estuary	SPA	-	Q2 2019
Blasket Islands	SPA	-	Q2 2019
Clare Island	SPA	-	Q2 2019
Cliffs of Moher	SPA	-	Q2 2019
Clonakilty Bay	SPA	-	Q2 2019
Cork Harbour	SPA	-	Q2 2019
Courtmacsherry Bay	SPA	-	Q2 2019
Cross Lough (Killadoon)	SPA	-	Q2 2019
Cruagh Island	SPA	-	Q2 2019
Cummeen strand	SPA	-	Q2 2019
Deenish Island and Scariff Island	SPA	-	Q2 2019
Dingle Peninsula	SPA	-	Q2 2019
Drumclif Bay	SPA	-	Q2 2019
Dungarvan Harbour	SPA	-	Q2 2019
Duvillaun Island	SPA	-	Q2 2019
Fanad Head	SPA	-	Q2 2019
Galley Head to Duneen Head	SPA	-	Q2 2019
Greers Island	SPA	-	Q2 2019
Helvick Head to Ballyquin	SPA	-	Q2 2019
High Island, Inishark and Davillaun	SPA	-	Q2 2019
Horn head to Fanad Head	SPA	-	Q2 2019
Illancrone and Iniskeeragh	SPA	-	Q2 2019
Illanmaster	SPA	-	Q2 2019
Illauonearaun	SPA	-	Q2 2019
Inisbofin Inishdoeey and Inishbeg	SPA	-	Q2 2019
Inisbofin, Omey Island and Turbot Island	SPA	-	Q2 2019
Inisduff	SPA	-	Q2 2019
Inisglora and Inishkeeragh	SPA	-	Q2 2019
Inishmore	SPA	-	Q2 2019
Inishmurray	SPA	-	Q2 2019
Inishtrahull	SPA	-	Q2 2019
Iniskea Islands	SPA	-	Q2 2019
Iniskeel	SPA	-	Q2 2019
Inner Galway Bay	SPA	-	Q2 2019
Iveragh Peninsula	SPA	-	Q2 2019
Keeraghs Islands	SPA	-	Q2 2019

Kerry Head	SPA	-	Q2 2019
Killala Bay/Moy Estuary	SPA	-	Q2 2019
Lady's Island Lake	SPA	-	Q2 2019
Loop Head	SPA	-	Q2 2019
Lough Foyle	SPA	-	Q2 2019
Magharees Islands	SPA	-	Q2 2019
Mid Clare coast	SPA	-	Q2 2019
mid-Waterford coast	SPA	-	Q2 2019
Mullet Peninsula	SPA	-	Q2 2019
Old Head of Kinsale	SPA	-	Q2 2019
Puffin Island	SPA	-	Q2 2019
Rathlin O'Beirne	SPA	-	Q2 2019
River Shannon and River Fergus Estuaries	SPA	-	Q2 2019
Roaninish	SPA	-	Q2 2019
Seven Heads	SPA	-	Q2 2019
Sheeps Head to Toe Head	SPA	-	Q2 2019
Sheskinmore Lough	SPA	-	Q2 2019
Skelligs	SPA	-	Q2 2019
Slyne Head to Ardmore Pt Islands	SPA	-	Q2 2019
Sovereign Islands	SPA	-	Q2 2019
Stags of Broadhaven	SPA	-	Q2 2019
Tacumshin Lake	SPA	-	Q2 2019
Termoncarragh Lake and Annagh Machair	SPA	-	Q2 2019

Annex 2.
List of baseline benthic surveys in SACs and SPAs completed in Ireland during the period 2009-2012.

MARINE INSTITUTE NATURA 2000 SITE BENTHIC SURVEYS						
SURVEY & DELIVERABLES STATUS UPDATE 26-9-12						
BENTHIC SURVEYS 2010						
Priority	Site	Survey Requirement	Contractor	Survey status	Data Submitted	Data Transferred
7	CARNSORE POINT	Intertidal Sediment	Ecoserve	Complete	Complete	Complete
		Reef		Complete	Complete	Complete
		Subtidal Reef	Aquafact	Complete	Complete	Complete
7	HOOK HEAD	Subtidal Sediment	Aquafact	Complete	Complete	Complete
		Subtidal Reef		Complete	Complete	Complete
7	SALTEE ISLANDS	Intertidal Sediment	Ecoserve	Complete	Complete	Complete
		Intertidal Reef		Complete	Complete	Complete

		Subtidal Sediment	Aquafact	Complete	Complete	Complete
		Subtidal Reef		Complete	Complete	Complete
35	KERRY HEAD SHOAL	Subtidal Reef	Aquafact	Complete	Complete	Complete
22	LWR R. SHANNON / SHANNON-FERGUS ESTUARY	Intertidal Sediment	Aquafact	Complete	Complete	Complete
		Subtidal Sediment	Aquafact	Complete	Complete	Complete
		Subtidal Reef		Complete	Complete	Complete
29	DRUMCLIFF BAY/ CUMEEN STRAND	Intertidal Sediment	ASU	Complete	Complete	Complete
		Subtidal Sediment	Aquafact	Complete	Complete	Complete
32	BALLYSADARE BAY	Intertidal Sediment	ASU	Complete	Complete	Complete
		Subtidal Sediment	Aquafact	Complete	Complete	Complete
23	KILLALA BAY/MOY ESTUARY	Intertidal Sediment	ASU	Complete	Complete	Complete
		Subtidal Sediment	Aquafact	Complete	Complete	Complete
27	CARLINGFORD LOUGH	Intertidal Sediment	ASU	Complete	Complete	Complete
19	BOYNE COAST AND ESTUARY	Intertidal Sediment	ASU	Complete	Complete	Complete
		Subtidal Sediment	Ecoserve	Complete	Complete	Complete
19	RIVER NANNY ESTUARY AND SHORE	Intertidal Sediment	ASU	Complete	Complete	Complete
28	MALAHIDE ESTUARY	Intertidal Sediment	ASU	Complete	Complete	Complete
19	BULL ISLAND	Intertidal Sediment	ASU	Complete	Complete	Complete
14	KILKIERAN BAY AND ISLANDS	Intertidal Sediment	APEM	Complete	Complete	Complete
		Intertidal Reef		Complete	Complete	Complete
	KILKIERAN BAY AND ISLANDS	Subtidal Sediment	Aquafact	Complete	Complete	Complete
		Subtidal Reef		Complete	Complete	Complete
24	MANNIN BAY	Subtidal Sediment	Aquafact	Complete	Complete	Complete
		Subtidal Reef		Complete	Complete	Complete
25	SLYNE HEAD AND ISLANDS	Subtidal Reef	Aquafact	Complete	Complete	Complete
	KINGSTOWN BAY	Subtidal Sediment	Aquafact	Complete	Complete	Complete
20	VALENTIA HARBOUR/PORTMAGEE CHANNEL	Intertidal Sediment	APEM	Complete	Complete	Complete
		Subtidal Sediment	Aquafact	Complete	Complete	Complete
		Subtidal Reef		Complete	Complete	Complete
33	BLASKET ISLANDS	Subtidal Reef	Aquafact	Complete	Complete	Complete
26	MULROY BAY	Subtidal Sediment	Aquafact	Complete	Complete	Complete
		Subtidal Reef		Complete	Complete	Complete
ADDITIONAL BENTHIC SURVEYS 2010						
21	RUTLAND ISLAND AND SOUND	Subtidal Sediment	Aquafact	Complete	Complete	Complete
		Subtidal Reef		Complete	Complete	Complete
34	GWEEDORE BAY AND ISLANDS	Subtidal Reef	Aquafact	Complete	Complete	Complete
18	North Inishowen / Trawbreaga*	Intertidal Sediment	RPS	Complete	Complete	Complete

3	Lough Swilly*	Intertidal Sediment	RPS	Complete	Complete	Complete
11	Donegal Bay*	Intertidal Sediment	RPS	Complete	Complete	Complete
17	Broadhaven Bay*	Intertidal Sediment	RPS	Complete	Complete	Complete
		Intertidal reef	RPS	Complete	Complete	Complete
17	Belmullet / Blacksod Bay complex*	Intertidal Sediment	RPS	Complete	Complete	Complete
		Intertidal reef	RPS	Complete	Complete	Complete
4	Clew Bay Complex*	Intertidal Sediment	RPS	Complete	Complete	Complete
8	Galway Bay Complex	Intertidal Sediment	RPS	Complete	Complete	Complete
2	Roaringwater Bay	Subtidal reef	ERM/MERC	Complete	Complete	Complete
		Intertidal reef	RPS	Complete	Complete	Complete
9	Tralee Bay	Intertidal Sediment	NUIG	Complete	Complete	Complete
		Intertidal Reef	RPS	Complete	Complete	Complete
		Subtidal Reef	Aquafact	Complete	Complete	Complete
12	Kenmare	Intertidal Reef	RPS	Complete	Complete	Complete
		Subtidal Reef	Aquafact	Complete	Complete	Complete
BENTHIC SURVEYS 2011/12						
19	Rogerstown Estuary	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
		Subtidal Sediment	ERM/MERC	Complete	Complete	Complete
57	South Dublin Bay	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
19	Baldoyle Bay	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
19	Lambay / Rockabill / Dalkey Is / Irelands Eye	Intertidal Reef	ERM/MERC	Complete	Complete	Complete
		Subtidal Reef	ERM/MERC	Complete	Complete	Complete
73	Ladys Island Lake	Intertidal Reef	ERM/MERC	Complete	Complete	Complete
		Subtidal Reef	ERM/MERC	Complete	Complete	Complete
40	Ballyteigue Burrow	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
		Subtidal Sediment	ERM/MERC	Complete	Complete	Complete
42	Black Head - Poulsallagh Complex	Intertidal Reef	ERM/MERC	Complete	Complete	Complete
		Subtidal Reef	ERM/MERC	Complete	Complete	Complete
44	Carrowmore Point to Spanish Point & Is.	Subtidal Reef	ERM/MERC	Complete	Complete	Complete
52	Kilkee Reefs	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
		Intertidal Reef	ERM/MERC	Complete	Complete	Complete
		Subtidal Reef	ERM/MERC	Complete	Complete	Complete
		Subtidal Sediment	ERM/MERC	Complete	Complete	Complete
38	Ballymacoda Bay	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
		Subtidal Sediment	ERM/MERC	Complete	Complete	Complete
63	Ballycotton Bay	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
47	Great Island Channel / Cork Harbour	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete

46	Courtmacsherry Bay & Estuary	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
		Subtidal Sediment	ERM/MERC	Complete	Complete	Complete
45	Clonakilty Bay	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
	Barleycove to Ballyrisode Point	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
BENTHIC SURVEYS 2011/12						
39	Ballyness Bay	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
		Subtidal Sediment	ERM/MERC	Complete	Complete	Complete
54	Rathlin O'Beirne Island	Subtidal Reef	ERM/MERC	Complete	Complete	Complete
56	Slieve League	Subtidal Reef	ERM/MERC	Complete	Complete	Complete
58	St Johns Point	Subtidal Sediment	ERM/MERC	Complete	Complete	Complete
		Subtidal Reef	ERM/MERC	Complete	Complete	Complete
		Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
60	Tory Island Coast	Subtidal Reef	ERM/MERC	Complete	Complete	Complete
62	West of Ardara / Mass Road	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
		Subtidal Sediment	ERM/MERC	Complete	Complete	Complete
55	Sheephaven	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
61	Tranarosan and Melmore Lough	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
64	Lough Foyle	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
65	Mid Clare Coast	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
		Intertidal Reef	ERM/MERC	Complete	Complete	Complete
37	Achill Head	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
		Subtidal Sediment	ERM/MERC	Complete	Complete	Complete
		Subtidal Reef	ERM/MERC	Complete	Complete	Complete
49	Inisheer Island	Subtidal Reef	ERM/MERC	Complete	Complete	Complete
50	Inishmann Island	Subtidal Reef	ERM/MERC	Complete	Complete	Complete
51	Inishmore Island	Subtidal Reef	ERM/MERC	Complete	Complete	Complete
25	Slyne Head Peninsula	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
		Intertidal Reef	ERM/MERC	Complete	Complete	Complete
		Subtidal Sediment	ERM/MERC	Complete	Complete	Complete
		Subtidal Reef	ERM/MERC	Complete	Complete	Complete
72	Conemara Bog Complex (Salt Lake)	Subtidal Reef	ERM/MERC	Complete	Complete	Complete
43	Bunduff Lough & Machair / Trawalua	Subtidal Reef	ERM/MERC	Complete	Complete	Complete
		Subtidal Sediment	ERM/MERC	Complete	Complete	Complete
		Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
		Intertidal Reef	ERM/MERC	Complete	Complete	Complete
59	Streedagh Point Dunes	Intertidal Sediment	ERM/MERC	Complete	Complete	Complete
	Kish/Bray Bank	Subtidal sediment	Aquafact	Complete	Complete	Complete

	Blackwater Bank	Subtidal sediment	Aquafact	Complete	Complete	Complete
	Hemptons Bank	Subtidal sediment	ERM/MERC	Complete	Complete	Complete
49-51	Aran Islands	Sea caves	ERM/MERC	Complete	Complete	Complete
2	Roaringwater Bay	Sea caves	ERM/MERC	Complete	Complete	Complete
53	Lough Hyne & Reef	Sea caves / reef	ERM/MERC	Complete	Complete	Complete
BENTHIC SURVEYS 2012/2013						
	Wicklow reef	Reef	ERM/MERC	Complete	Complete	Complete