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MARINE SCOTLAND LICENSING OPERATIONS TEAM'S ("MS-LOT")
ASSESSMENT OF THE PROJECT'S IMPLICATIONS FOR DESIGNATED
SPECIAL AREAS OF CONSERVATION ("SAC"), SPECIAL PROTECTION AREAS
("SPA") AND PROPOSED SPECIAL PROTECTION AREAS ("pSPA") IN VIEW OF
THE SITES' CONSERVATION OBJECTIVES.

APPLICATION FOR A MARINE LICENCE UNDER THE MARINE (SCOTLAND) ACT
2010 FOR THE CONSTRUCTION OF A MARINA AND BREAKWATER EXTENSION
AT GRANTON WEST HARBOUR AND ASSOCIATED CAPITAL DREDGING AND
DREDGE SPOIL DEPOSIT ACTIVITIES.

SECTION 1: BACKGROUND

1 Appropriate assessment ("AA") conclusion

- 1.1 This AA concludes that there will be no adverse effect on the site integrity of the Firth of Forth SPA, Firth of Tay and Eden Estuary SAC, Forth Islands SPA, Imperial Dock Lock, Leith SPA, Outer Firth of Forth and St Andrews Bay Complex pSPA, Isle of May SAC, Berwickshire and North Northumberland Coast SAC and River Teith SAC (where each SAC, pSPA or SPA is taken as a whole) from the Edinburgh Marina Granton Harbour Ltd proposal either in isolation or in combination with other plans or projects, providing that the conditions set out in Section 4 are complied with.
- 1.2 MS-LOT consider that the most up to date and best scientific advice available has been used in reaching the conclusion that the Edinburgh Marina Granton Harbour Ltd proposal will not adversely affect the integrity of these sites and are satisfied that no reasonable scientific doubt remains.

2 Introduction

- 2.1 This is a record of the AA of the Edinburgh Marina Granton Harbour Ltd proposal to construct a marina and breakwater extension and carry out associated capital dredging and dredge spoil deposit activities at the Granton West Harbour. The assessment has been undertaken by MS-LOT. This assessment is required under Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 ("the Regulations"). This AA is in accordance with Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive") and Council Directive 2009/147/EC on the conservation of wild birds ("the Birds Directive"). MS-LOT, as the 'competent authority' under the 1994 Habitats Regulations, has to be satisfied that the project will not adversely affect the

integrity of any European site (SAC and SPA) before it can grant consent for the project.

- 2.2 A detailed AA has been undertaken and Scottish Natural Heritage (“SNH”) , and the Royal Society for the Protection of Birds, Scotland (“RSPB Scotland”) have been consulted.

3 Background to including assessment of new SPA

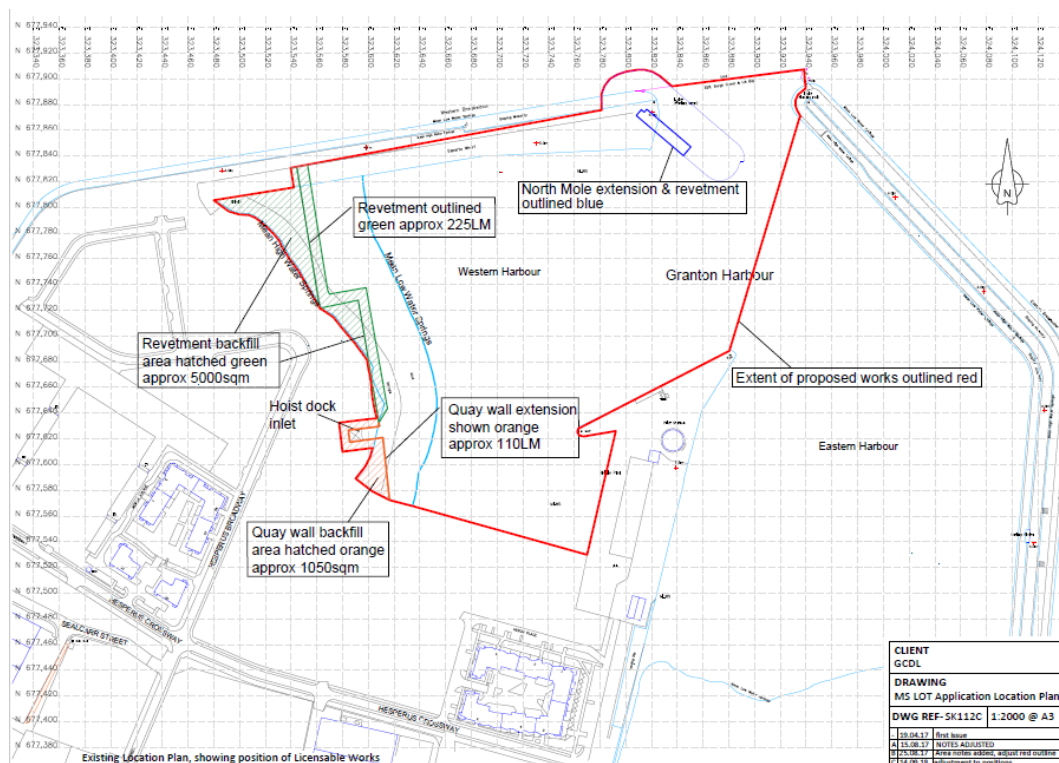
- 3.1 The Scottish Ministers, as a 'competent authority' under the Regulations, must be satisfied that the proposal will not adversely affect the integrity of any European site (SAC and SPA, known as Natura sites) either alone or in combination with other plans or projects before authorisations can be given for the proposal.
- 3.2 In Scotland, Scottish Ministers are currently in the process of identifying a suite of new marine SPA. In 2014 advice was received from the statutory nature conservation bodies (“SNCB”) on the sites most suitable for designation and at this stage they became draft SPA (“dSPA”). Once Scottish Ministers have agreed the case for a dSPA to be the subject of a public consultation, the proposal is given the status of proposed SPA (“pSPA”) and receives policy protection, which effectively puts such sites in the same position as designated sites, from that point forward until a decision on classification of the site is made. This policy protection for pSPA is provided by Scottish Planning Policy (paragraph 210), the UK Marine Policy Statement (paragraph 3.1.3) and Scotland’s National Marine Plan (paragraph 4.45).
- 3.3 It is not a legal requirement under the Habitats Directive or relevant domestic regulations for this assessment to assess the implications of the proposal on the pSPA. The assessment includes an assessment of implications upon those sites in accordance with domestic policy. Scottish Ministers are also required to consider article 4(4) of the Birds Directive in respect of the pSPA. The considerations under article 4(4) of the Birds Directive are separate and distinct to the considerations which must be assessed under this Habitats Directive assessment but they are, nevertheless, set out within this assessment (see paragraphs 9.10 and 9.11).
- 3.4 In accordance with regulation 50 of the 1994 Habitats Regulations the Scottish Ministers will, as soon as reasonably practicable following the formal designation of the pSPA, review their decisions if the proposal is authorised. This will include a supplementary AA being undertaken concerning the implications of the proposal on the sites as designated (as they are currently

pSPA their conservation objectives are currently in draft form, their conservation objectives are finalised at the point the sites are designated).

4 Details of proposed operation

- 4.1 The works form part of the Granton Harbour Regeneration Development.
- 4.2 On the west side of the existing West harbour, 225m of sloping masonry revetment will be reconstructed and this will be extended to the south by the construction of a new quay wall, 110m in length. This will be a sheet piled wall which will be backfilled with material from on site to reclaim land.
- 4.3 The existing western breakwater (north mole) will be extended with a 50 metre concrete wall. This will have an inclined slope of rock armour on the seaward side and an additional 25 metres of rock revetment on the end for additional protection.
- 4.4 A 340 berth marina will be created with floating berths and pontoons and will extend to approximately 22879m².
- 4.5 Capital dredging will be required in the new marina area and also the approach channel. Due to contamination identified in the pre-dredge sediment analysis, all material from below 1.2 metres and all material from around sample locations 8 and 9 will be taken ashore for land based disposal, 154,385m³. In addition, a small amount of material will be re-used within the land reclamation, 19,322m³. The remainder of the material, 86,980m³, will be taken for sea disposal at a licensed disposal site in the Firth of Forth. Dredging will be carried out using a backhoe dredger. The works are scheduled to start in June 2019 and to be completed by May 2022.
- 4.6 A full project description can be found [here](#).

Figure 1 shows the layout of the proposed works.



5 Consultation

5.1 The consultation bodies were consulted on the application and supporting information including a Habitat Regulations Appraisal (HRA) on 13 November 2018. The RSPB responded on 05 December 2018, and SNH provided their response on 03 December 2018.

6 Main points raised during consultation

6.1 SNH supported the findings of the HRA carried out by Edinburgh Marina Granton Harbour Ltd and confirmed that there was a likely significant effect on the Firth of Forth SPA, Forth Islands SPA, Imperial Dock Lock, Leith SPA, Isle of May SAC, Berwickshire and North Northumberland Coast SAC, Outer Firth of Forth and St Andrews Bay Complex pSPA and River Teith SAC. They support the conclusion of Edinburgh Marina Granton Harbour Ltd that there would be no likely significant effect on the Firth of Tay and Eden Estuary SAC from the proposed works.

6.2 The RSPB advised that in their opinion the proposed works could have an effect on a number of internationally designated sites, notably the Firth of Forth SPA, and proposed a number of mitigation measures which could be used to reduce any impacts. They recommended that bubble curtains should be used to mitigate the impact of piling on marine mammals however, having considered the advice from SNH and the potential for the works to affect marine mammals, the Scottish Ministers have concluded that the mitigation

measures proposed by the applicant in the Marine Mammal Protection Protocol are sufficient and that bubble curtains are not required.

SECTION 2: INFORMATION ON NATURA SITES

7 Background information and qualifying interests for the relevant Natura sites

7.1 This section provides links to the Scottish Natural Heritage Interactive (“SNHI”) website where the background information on the site being considered in this assessment is available. The qualifying interests for the site are listed as are the conservation objectives.

Table 1 Name of Natura site affected and current status

<p><u>Firth of Forth SPA</u> https://sitelink.nature.scot/site/8499</p> <p><u>Firth of Tay and Eden Estuary SAC</u> https://sitelink.nature.scot/site/8257</p> <p><u>Forth Islands SPA</u> https://sitelink.nature.scot/site/8500</p> <p><u>Imperial Lock Dock, Leith SPA</u> https://sitelink.nature.scot/site/8668</p> <p><u>Outer Firth of Forth and St Andrews Bay Complex pSPA</u> https://sitelink.nature.scot/site/10478</p> <p><u>Isle of May SAC</u> https://sitelink.nature.scot/site/8278</p> <p><u>Berwickshire and North Northumberland Coast SAC</u> https://sitelink.nature.scot/site/8207</p> <p><u>River Teith SAC</u> https://sitelink.nature.scot/site/8367</p>

Table 2 European qualifying interests

<p><u>Firth of Forth SPA</u></p> <ul style="list-style-type: none">• Bar-tailed godwit (<i>Limosa lapponica</i>), non-breeding

- Common scoter (*Melanitta nigra*), non-breeding
- Cormorant (*Phalacrocorax carbo*), non-breeding
- Curlew (*Numenius arquata*), non-breeding
- Dunlin (*Calidris alpina alpina*), non-breeding
- Eider (*Somateria mollissima*), non-breeding
- Golden plover (*Pluvialis apricaria*), non-breeding
- Goldeneye (*Bucephala clangula*), non-breeding
- Great crested grebe (*Podiceps cristatus*), non-breeding
- Grey plover (*Pluvialis squatarola*), non-breeding
- Knot (*Calidris canutus*), non-breeding
- Lapwing (*Vanellus vanellus*), non-breeding
- Long-tailed duck (*Clangula hyemalis*), non-breeding
- Mallard (*Anas platyrhynchos*), non-breeding
- Oystercatcher (*Haematopus ostralegus*), non-breeding
- Pink-footed goose (*Anser brachyrhynchus*), non-breeding
- Red-breasted merganser (*Mergus serrator*), non-breeding
- Red-throated diver (*Gavia stellata*), non-breeding
- Redshank (*Tringa totanus*), non-breeding
- Ringed plover (*Charadrius hiaticula*), non-breeding
- Sandwich tern (*Sterna sandvicensis*), passage
- Scaup (*Aythya marila*), non-breeding
- Shelduck (*Tadorna tadorna*), non-breeding
- Slavonian grebe (*Podiceps auritus*), non-breeding
- Turnstone (*Arenaria interpres*), non-breeding
- Velvet scoter (*Melanitta fusca*), non-breeding
- Waterfowl assemblage, non-breeding
- Wigeon (*Anas penelope*), non-breeding

Firth of Tay and Eden Estuary SAC

- Estuaries
- Intertidal mudflats and sandflats
- Harbour seal (*Phoca vitulina*)
- Subtidal sandbanks

Forth Islands SPA

- Arctic tern (*Sterna paradisaea*), breeding
- Common tern (*Sterna hirundo*), breeding
- Cormorant (*Phalacrocorax carbo*), breeding
- Gannet (*Morus bassanus*), breeding
- Guillemot (*Uria aalge*), breeding
- Herring gull (*Larus argentatus*), breeding
- Kittiwake (*Rissa tridactyla*), breeding
- Lesser black-backed gull (*Larus fuscus*), breeding
- Puffin (*Fratercula arctica*), breeding
- Razorbill (*Alca torda*), breeding
- Roseate tern (*Sterna dougalli*), breeding
- Sandwich tern (*Sterna sandvicensis*), breeding
- Seabird assemblage, breeding
- Shag (*Phalacrocorax aristotelis*), breeding

Imperial Dock Lock, Leith SPA

- Common tern (*Sterna hirundo*), breeding

Outer Firth of Forth and St Andrews Bay Complex pSPA

- Arctic tern (*Sterna paradisaea*), breeding
- Common tern (*Sterna hirundo*), breeding
- Gannet (*Morus bassanus*), breeding
- Guillemot (*Uria aalge*), breeding
- Herring gull (*Larus argentatus*), breeding
- Kittiwake (*Rissa tridactyla*), breeding
- Manx shearwater (*Puffinus puffinus*), breeding
- Puffin (*Fratercula arctica*), breeding
- Seabird assemblage, breeding
- Shag (*Phalacrocorax aristotelis*), breeding
- Black-headed gull (*Chroicocephalus ridibundus*), non-breeding
- Common gull (*Larus canus*), non-breeding
- Common scoter (*Melanitta nigra*), non-breeding
- Eider (*Somateria mollissima*), non-breeding
- Goldeneye (*Bucephala clangula*), non-breeding
- Guillemot (*Uria aalge*), non-breeding
- Herring gull (*Larus argentatus*), non-breeding
- Kittiwake (*Rissa tridactyla*), non-breeding
- Little gull (*Hydrocoloeus minutus*), non-breeding
- Long-tailed duck (*Clangula hyemalis*), non-breeding
- Razorbill (*Alca torda*), non-breeding
- Red-breasted merganser (*Mergus serrator*), non-breeding
- Red-throated diver (*Gavia stellata*), non-breeding
- Seabird assemblage, non-breeding
- Shag (*Phalacrocorax aristotelis*), non-breeding
- Slavonian grebe (*Podiceps auritus*), non-breeding
- Velvet scoter (*Melanitta fusca*), non-breeding
- Waterfowl assemblage, non-breeding

Isle of May SAC

- Grey seal (*Halichoerus grypus*)
- Reefs

Berwickshire and North Northumberland Coast SAC

- Grey seal (*Halichoerus grypus*)
- Intertidal mudflats and sandflats
- Reefs
- Sea caves
- Shallow inlets and bays

River Teith SAC

- Atlantic Salmon (*Salmo salar*)
- Brook lamprey (*Lampetra planeri*)
- River lamprey (*Lampetra fluviatilis*)
- Sea lamprey (*Petromyzon marinus*)

Table 3 Conservation objectives

Firth of Forth SPA, Forth Islands SPA, Imperial Dock Lock, Leith SPA

To avoid deterioration of the habitats of the qualifying species (listed above) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Firth of Tay and Eden Estuary SAC, Isle of May SAC, Berwickshire and North Northumberland Coast SAC

To avoid deterioration of the qualifying habitats (listed above) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying habitats that the following are maintained in the long term:

- Extent of the habitat on site
- Distribution of the habitat within site
- Structure and function of the habitat
- Processes supporting the habitat
- Distribution of typical species of the habitat
- Viability of typical species as components of the habitat
- No significant disturbance of typical species of the habitat

Firth of Tay and Eden Estuary SAC, Isle of May SAC, Berwickshire and North Northumberland Coast SAC, River Teith SAC

To avoid deterioration of the habitats of the qualifying species (listed above) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are established then maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species

Outer Firth of Forth and St Andrews Bay Complex pSPA (Draft Conservation Objectives)

The following conservation objectives are still in draft form and have not yet been agreed.

To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, subject to natural change, thus ensuring that the integrity of the site is maintained in the long-term and it continues to make an appropriate contribution to achieving the aims of the Birds Directive for each of the qualifying species.

This contribution will be achieved through delivering the following objectives for each of the site's qualifying features:

- a) Avoid significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long-term;
- b) To maintain the habitats and food resources of the qualifying features in favourable condition.

SECTION 3: ASSESSMENT IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994

8 Requirement for appropriate assessment

8.1 *Is the operation directly connected with or necessary to conservation management of the site?*

The operation is not directly connected with or necessary to conservation management of the site.

8.2 *Is the operation likely to have a significant effect on the qualifying interest?*

In their response, dated 03 December 2018, SNH advised that they support the conclusions of the HRA report, submitted by Edinburgh Marine Granton harbour Ltd in regards to likely significant effects.

SNH agree with the HRA assessment which concluded that there would be no likely significant effects on any of the qualifying interests of the Firth of Tay and Eden Estuary SAC due the distance between the designated site and the proposed works. This site will not be considered further in this assessment.

With regards to the other designated sites, the HRA report concluded that there could be a likely significant effect on the following qualifying interests:

Firth of Forth SPA

- All qualifying bird species excluding Pink-footed goose (*Anser brachyrhynchus*), non-breeding

Forth Islands SPA

- All qualifying bird species

Imperial Dock Lock, Leith SPA

- Common tern (*Sterna hirundo*)

Outer Firth of Forth and St Andrews Bay Complex pSPA

- All qualifying bird species

Isle of May SAC

- Grey seal (*Halichoerus grypus*)

Berwickshire and North Northumberland Coast SAC

- Grey seal (*Halichoerus grypus*)

River Teith SAC

- Atlantic Salmon (*Salmo salar*)
- River lamprey (*Lampetra fluviatilis*)
- Sea lamprey (*Petromyzon marinus*)

MS-LOT agreed with the above conclusions and have undertaken an AA for the above listed qualifying interests of the Firth of Forth SPA, Forth Islands SPA, Imperial Dock Lock, Leith SPA, Outer Firth of Forth and St Andrews

Bay Complex pSPA, Isle of May SAC, Berwickshire and North Northumberland Coast SAC and River Teith SAC.

9 Appropriate assessment of the implications for the site in view of the site's conservation objectives.

9.1 MS-LOT have considered the HRA report submitted by Edinburgh Marina Granton Harbour Ltd and the advice provided by SNH on 03 December 2018 to support this assessment. In addition, the RSPB comments of the 05 December 2018 have been considered by MS-LOT in their assessment.

9.2 Firth of Forth SPA - all qualifying bird species excluding pink-footed goose (*Anser brachyrhynchus*), non-breeding

9.2.1 SNH support the conclusion of the HRA report that there will be no adverse effect on site integrity from the proposed works. In addition, they highlight the section of the EIA report which provides evidence that changes to sediment transport will be negligible and therefore have no effects on the area of supporting habitat available to SPA birds.

9.2.2 Edinburgh Marina Granton Harbour Ltd has identified that the only long term potential impact is displacement from foraging habitat adjacent to the proposed development area and the surrounding waters due to potential noise disturbance. However, there is sufficient alternative foraging habitat available such that it would not impact long term population viability. The release of chemical pollutants into the water could have temporary impacts on the function and supporting processes of qualifying species in the vicinity of the works. However the risk of this occurring is minimal as Edinburgh Marina Granton Harbour Ltd will ensure that the relevant Guidance for Pollution Prevention is adhered to.

9.2.3 The RSPB agree that some short term disturbance or displacement may occur in the immediate vicinity of the works however this should not lead to permanent loss of habitat. Birds in the area should be habituated to a certain amount of human activity including noise however they recommend that whenever possible, works are carried out in such a way as to minimise noise and other potential sources of disturbance to birds, and at times of day which avoid low-tide feeding activity.

9.2.4 MS-LOT concur with the view of SNH, RSPB and Edinburgh Marina Granton Harbour Ltd that providing that the conditions listed in section 4 are adhered to there will be no adverse effect on the site integrity of the Firth of Forth SPA.

9.3 Forth Islands SPA – all qualifying bird species

9.3.1 SNH support the conclusions of the HRA report that there will no adverse effects on site integrity .

9.3.2 The HRA report found that the only long term potential impact could be displacement from foraging habitat due to noise disturbance in the vicinity of the works. It is possible that any qualifying species using this habitat would become habituated to vessel movements. However, if this does not occur then there is sufficient alternative habitat available that this would not adversely affect the integrity of the site. There is the potential for chemical pollutants to be released into the water during construction and operation which could impact the function and supporting processes of the foraging habitat within the SPA, leading to reduced prey availability. This would be a short term effect and the risk of occurrence can be minimised by adherence to the relevant Guidance for Pollution Prevention.

9.3.3 MS-LOT concur with the view of SNH and the conclusions of the HRA report that there will be no adverse effect on the site integrity of the Forth Islands SPA from the Edinburgh Marina Granton Harbour Ltd proposal, providing that the conditions in section 4 are adhered to.

9.4 Imperial Dock Lock, Leith SPA - common tern (*Sterna hirundo*)

9.4.1 SNH support the conclusions of the HRA report that there will no adverse effects on site integrity.

9.4.2 The HRA report identifies that there is the potential for common terns to utilise the open water surrounding Granton harbour to forage in. However, any impacts are unlikely to be significant due to the localised nature of impacts, mobility of birds and the availability of potential food in other areas around the Port of Leith and wider Firth of Forth. The distance between the proposed works and the SPA is such that no impacts from noise are predicted.

9.4.3 MS-LOT agree with the conclusions of Edinburgh Marina Granton Harbour Ltd and SNH that the proposal in isolation will not adversely affect the Imperial Dock Lock, Leith SPA.

9.5 Outer Firth of Forth and St Andrews Bay Complex pSPA – all qualifying bird species

- 9.5.1 SNH advise that there will be no adverse effects on site integrity and are in agreement with the HRA report carried out by Edinburgh Marina Granton Harbour Ltd.
- 9.5.2 The HRA report concludes that there is the possibility of localised temporary effects on food sources however this is not likely to be significant due to the availability of food sources around the wider Firth of Forth. The site is currently subject to noise disturbance from human activities and vessel movements so it is not predicted that the additional noise generated by the works will affect the qualifying species. The works will not result in any direct loss of habitat.
- 9.5.3 MS-LOT agree with the findings of the HRA report prepared by Edinburgh Marina Granton Harbour Ltd and SNH that the proposal in isolation will not adversely affect the Outer Firth of Forth and St Andrews Bay Complex pSPA.
- 9.6 Isle of May SAC – grey seal (*Halichoerus grypus*)
- 9.6.1 SNH advised that they support the conclusions of the HRA report in relation to the impacts of dredging on the grey seal qualifying feature however they also advised that the impact of the piling works need to be considered. They further advised that if the marine mammal mitigation plan (“MMMP”) provided by the applicant is adhered to then there will be no adverse effects on the integrity of the site.
- 9.6.2 The HRA report carried out by Edinburgh Marina Granton Harbour Ltd concludes that the noise from the dredging works may have an impact on individuals, there will be no population level consequences. Further, in relation to grey seals, they will be able to detect the noise but it will be too weak to induce an observable reaction. In relation to piling, the applicant concluded that any disturbance would be short term and potentially cause avoidance behaviour however this effect is unlikely to be significant in the context of the conservation of objectives of the Isle of May SAC.
- 9.6.3 MS-LOT agree with the conclusions of SNH that providing the MMMP is adhered to, there will be no adverse effects on site integrity from the proposed works.
- 9.7 Berwickshire and North Northumberland Coast SAC – grey seal (*Halichoerus grypus*)
- 9.7.1 SNH advised that their advice for this site was as for the Isle of May SAC, i.e. that the HRA report carried out by Edinburgh Marina Granton Harbour Ltd accurately addressed the potential impact from the dredging activities

however further assessment of the impact of the piling works is required. In their view, providing the MMMP is adhered to, there will be no adverse effect on site integrity.

- 9.7.2 The HRA report also concluded that the potential impacts on the Berwickshire and North Northumberland Coast SAC are similar to those identified for the Isle of May SAC although the distance between this site and the proposed works is greater so the risk of potential impacts occurring is lower.
- 9.7.3 MS-LOT agrees with the conclusions of Edinburgh Marina Granton Harbour Ltd that the risk of impacts on the North Northumberland Coast SAC from the proposed works is low however, as suggested by SNH, the MMMP should be adhered to, to ensure that there is no adverse effect on site integrity.
- 9.8 River Teith SAC – Atlantic salmon (*Salmo salar*), river lamprey (*Lampetra fluviatilis*) and sea lamprey (*Petromyzon marinus*)
- 9.8.1 SNH advised that they agree with the conclusions of the HRA report and that there will be no adverse effects on site integrity from the proposed works.
- 9.8.2 The HRA report concludes that the nearest population of river lamprey is approximately 58km away from the proposed works and that they are unlikely to be impacted by the works. Research suggests that sea lamprey are widely dispersed in the marine environment and thus the risk of them being impacted by the proposed works is extremely small. This view is further supported by the distance between the proposed works and the boundary of the SAC. With regards to Atlantic salmon, the potential impacts are not thought to extend beyond 500m from the proposed works at Edinburgh marina. In addition, the risk of salmon destined for or originating from the SAC passing within this buffer zone is extremely low. Further, any changes to coastal processes or sediment suspension caused by the works will be localised to the harbour and thus not affect the SAC.
- 9.8.3 MS-LOT agree with the conclusions of SNH and Edinburgh Marina Granton Harbour Ltd that due to the distance between the proposed works and the River Teith SAC, the works in isolation are unlikely to have an adverse effect on site integrity.
- 9.9 In summary, SNH advise that they agree with the conclusions of the HRA report prepared by Edinburgh Marina Granton Harbour Ltd. The HRA report concluded that effects on the Isle of May SAC and Berwickshire and North Northumberland Coast SAC could be sufficiently mitigated by adherence to the MMMP. The River Teith SAC and Imperial Dock Lock, Leith SPA are

sufficiently distant from the proposed works at Granton harbour that any effects are likely to be insignificant. For the bird qualifying interests of the Firth of Forth SPA, the Forth Islands SPA and the Outer Firth of Forth and St Andrews Bay Complex pSPA, there is sufficient alternative habitat available that providing mitigation measures are adhered to, any effects of the proposed works will not affect the integrity of the protected site. MS-LOT concur with the view of SNH and the RSPB that this project in isolation will not have an adverse effect on the integrity of the Firth of Forth SPA, the Forth Islands SPA, the Imperial Dock Lock, Leith SPA, the Outer Firth of Forth and St Andrews Bay Complex pSPA, the Isle of May SAC, the Berwickshire and North Northumberland Coast SAC or the River Teith SAC.

- 9.10 As detailed in paragraph 3.3, as the Outer Firth of Forth and St Andrews Bay Complex pSPA has not yet been designated, it also falls within the regime governed by the first sentence of Article 4(4) of the Birds Directive as follows;

“In respect of the protection areas referred to in paragraphs 1 and 2, Member States shall take appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds, in so far as these would be significant having regard to the objectives of this Article. Outside these protection areas, Member States shall also strive to avoid pollution or deterioration of habitats.”

- 9.11 MS-LOT has considered the information contained within the Edinburgh Marina Granton Harbour Ltd proposal and the advice provided by SNH and conclude that the works will not cause pollution or deterioration of habitats and any disturbance will be negligible.

10 In-combination assessment

- 10.1 MS-LOT have carried out an in-combination assessment to ascertain whether the Edinburgh Marina Granton Harbour Ltd proposal will have a cumulative effect with other plans or projects which, in combination, would have the potential affect the qualifying interests of the Firth of Forth SPA, the Forth Islands SPA, the Imperial Dock Lock, Leith SPA, the Outer Firth of Forth and St Andrews Bay Complex pSPA, the Isle of May SAC, the Berwickshire and North Northumberland Coast SAC or the River Teith SAC.

The following projects currently have an active marine licence and associated AA which identified a likely significant effect on the qualifying interests of one or more of the Firth of Forth SPA, the Forth Islands SPA, the Imperial Dock Lock, Leith SPA, the Outer Firth of Forth and St Andrews Bay Complex pSPA, the Isle of May SAC, the Berwickshire and North Northumberland Coast SAC and the River Teith SAC. The in-combination

effects of these plans and proposals on each of the protected sites have been considered in paragraphs 10.18 to 10.24.

10.2 Forth Road Bridge Maintenance Works

10.2.1 Bridge maintenance works, incorporating various schemes as outlined in the supporting information submitted to Marine Scotland as part of the marine licence application. The programme of works is scheduled for an initial period of 5 years, with the option for 5 additional 1 year extensions and is currently anticipated to conclude by October 2020. Works are predominantly at bridge deck level but have been conditioned to limit noisy activities during bird breeding season and in the vicinity of Long Craig Island, which lies beneath the Forth Road Bridge on the North side of the Firth of Forth, part of the Forth Islands SPA

10.2.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Firth of Forth SPA due to the extensive alternative areas of habitat available for wintering birds. SNH advised that population, displacement and disturbance effects would be minor, temporary and very limited in area. However, it also concluded that the qualifying species of the Forth Islands SPA being breeding seabirds (Arctic and roseate tern) on Long Craig Island could potentially be displaced or disturbed from increased dust/ liquid emissions, or noise levels resulting in a negative effect on breeding success caused by potential colony abandonment. This resulted in conditioning of the licence to restrict, where possible, activities that cause high noise / vibration levels to out with the breeding bird season (March to August inclusive) and works to be undertaken out with peak activity times (early morning and evening).

10.3 Kincardine Bridge Maintenance Works

10.3.1 The current licence is for activities including viaduct waterproofing, concrete repairs and maritime navigation lighting. The AA completed identified that noise and vibration arising from the works could cause disturbance or displacement of the qualifying interests of the Firth of Forth SPA. The licence is valid for 4 years, until April 2019, however, works may only be undertaken during March and April each year, at the end of each wintering season, when birds are present in relatively small numbers, to ensure no adverse effect on the site integrity of the Firth of Forth SPA. The works at Granton harbour are not scheduled to commence until June 2019 which is after the completion of this project therefore the Kincardine Bridge maintenance works will not be included in the in combination assessment.

10.4 Aberdeen Harbour Expansion Project

- 10.4.1 Aberdeen Harbour Board proposes to develop a new harbour facility at Nigg Bay, Aberdeen, approximately 0.8km south of the existing harbour in Aberdeen City centre. Their proposal includes construction of two breakwaters, quaysides and associated infrastructure as well as a large-scale capital dredge and dredge spoil deposit operation. Works commenced in late 2016 and are scheduled to take place over a 3-year period. Construction works began in May 2017 with the construction of the northern breakwater.
- 10.4.2 Dredging operations are ongoing. Blasting operations commenced in late summer 2018. Piling works will be undertaken utilising a rotary piling method which is thought to produce less noise than impact piling. All marine elements of the works are scheduled to be complete by February 2020.
- 10.4.3 Full details of the project can be found in the documentation [here](#).
- 10.5 Forthwind Offshore Development - Methil
- 10.5.1 The Development will consist of two, two-bladed lattice structure wind turbine generators (“WTGs”), associated infrastructure and electricity export cables approximately 1.5 km off the northern shore of the Firth of Forth at Methil, Fife. The WTGs will be located in waters 10 to 20m deep, have a hub height of 109 to 121m, a maximum tip height of 198.5m and a generating capacity per turbine of up to 9 megawatts (“MW”). The maximum rotor diameter of the turbines is 155m. Each turbine will have a substructure of steel jackets with pin piles. The turbines will have three main elements i.e. rotor, nacelle and tower. The project footprint for each turbine (includes turbine foundations, trenching for export cables and jack up barge/vessel footprint) will be 37,400m². There will be an export cable for each turbine that will connect to the sub-station and control building at Fife Energy Park. Construction will take place over a 3 to 6 month period (with installation of the turbines and export cable expected to take 8 weeks) followed by testing and commissioning before becoming operational. A full project description can be found [here](#).
- 10.5.2 Construction works have not yet commenced on site and the developer is currently applying to vary the permitted works. .
- 10.6 Hexicon – Dounreay Tri Floating Wind Demonstration Project
- 10.6.1 The Development will consist of a demonstration floating offshore wind farm called Dounreay Tri which shall consist of:

- A two turbine offshore wind farm with an installed capacity of between 8 to 12 MW, at least 6km off Dounreay, Caithness;
- A single, 33kV, export cable to bring the power to shore immediately to the west of the Dounreay Restoration Site fence line; and
- Subject to a Connection Offer from Scottish and Southern Energy Power Distribution, the associated onshore electrical infrastructure to connect the Project at, or near, the existing substation at Dounreay.

10.6.2 The main offshore components will include:

- Two offshore wind turbines;
- A floating foundation;
- Mooring clump weight;
- Mooring chain and/or steel lines;
- Drag embedment anchors;
- One cable to bring the renewable electricity ashore; and
- Scour protection for the anchors and the export cable, where necessary.

A full project description can be found [here](#). The company behind this development has gone into administration and presently the project is 'on hold'. Although there is interest from other organisations in buying the existing consents, work is currently suspended.

10.7 Levenmouth Demonstration Turbine

10.7.1 The project involves the construction, operation and decommissioning of a site for the testing of new designs of offshore wind turbines with a capacity of up to 7 MW at the Fife Energy Park, Methil. There is potential for more than one turbine model to be tested at the site. Once one turbine has been tested it will be removed from the site and replaced with a new turbine which falls within the same design parameters (maximum hub height of 110m, rotor diameter of 172m, and maximum height to turbine tip from Mean Sea Level ("MSL") of 196m). Only one turbine will ever be installed at any one time. The base will remain in place throughout the Development. The consent for this development expires in 2029.

10.7.2 The Development comprises:

- A single, three bladed demonstration wind turbine with an installed capacity of up to 7 MW. The turbine tower is up to 110 m tall, from MSL including the base jacket. The turbine has a maximum rotor diameter of 172 m, giving a maximum level from the MSL to turbine tip of up to 196 m;
- A personnel bridge connection between the Fife Energy Park ("FEP") and turbine tower;

- Construction of an onshore crane pad on the FEP; and
- Construction of an onshore Control compound

10.7.3 A full project description can be found [here](#).

10.8 Royal National Lifeboat Institution – Maintenance Works – Kinghorn and North Berwick Lifeboat Stations

10.8.1 This project covers routine, ongoing maintenance works for a 6 year period at a number of sites around Scotland that are owned and managed by the RNLI. A likely significant effect on the Firth of Forth SPA was identified for the sites at Kinghorn and North Berwick and an AA carried out. The activities covered will be maintenance and repair including like for like replacement of elements of the structure including re-inforcing or repairing the slipway toe up to a maximum additional area of 6m². In addition cleaning of the slipway structure for safety purposes may be carried out. This licence does not cover any piling works.

10.8.2 Although the licence covers a 6 year period, the proposed works will only be carried out infrequently and work programmes will generally last one to two weeks and some programmes may be completed in a single day.

10.9 The Coal Authority – Removal of a Temporary Pipeline – East Wymss

10.9.1 These works are to remove a temporary sea outfall pipeline at the Former Michael Colliery after the cessation of water pumping trials from within the mine shafts. The entire 130 m pipeline, 86 m³ of rock armour, 17 m³ of concrete and other associated infrastructure will be removed using a land based excavator and crane. The works are scheduled to last for a period of 4 weeks, between 1 January 2019 and 15 May 2019. The project will be complete before the works at Granton harbour commence and therefore the Coal Authority works at East Wymss will not be included in the in combination assessment..

10.10 Forth and Tay Windfarm Developments

10.10.1 When considered collectively, the following developments are referred to as the “Forth and Tay Windfarm Developments”

- Neart na Gaoithe Offshore Windfarm Limited development (“NnGOWL”), approximately 15.5km to the east of Fife Ness in the outer Firth of Forth.
- Inch Cape Offshore Limited development (“ICOL”), approximately 15km to the east off the Angus coastline.

- Seagreen Alpha Wind Energy Limited development (“SAWEL”), approximately 27km off the Angus coastline.
- Seagreen Bravo Wind Energy Limited development (“SBWEL”), approximately 38km off the Angus coastline.

10.10.2 A full project description for each development can be found here:

[NNGOWL](#), [ICOL](#), [SAWEL](#), [SBWEL](#). These projects all received marine licences and consent under section 36 of the Electricity Act 1989 (as amended) in October 2014 (“the Original Consent”). These projects were not been progressed due to delays associated with a judicial review and have all submitted applications for new section 36 and marine licences to reflect recent technological advances.

10.10.3 In December 2018, NNGOWL were granted a new section 36 consent and two marine licences in respect of the Neart na Gaoithe Offshore Wind Farm (Revised Design), which comprises of fewer, larger turbines when compared to the Original Consent. Construction activities for the Revised Design are scheduled to commence in Q3 2021 and conclude in late 2022.

10.10.4 Construction timeframes for the existing consents for ICOL, SBWEL and SAWEL remain unclear at present.

10.11 Hywind Scotland Pilot Park

10.11.1 Five 6MW turbines have been installed approximately 25 km off the coast at Peterhead, North East Scotland, just outside the 12 nautical mile territorial water limit. The project will be expected to produce up to 135 GWh per year of electricity. The turbines are positioned between 800 to 1,600 m apart and attached to the seabed by a three-point mooring spread and anchoring system. Three anchors are required per turbine and the radius of the mooring system extends 600 to 1,200 m out from each turbine.

10.11.2 The turbines are connected by inter-array cables which may require stabilisation in some locations. The export cable, which transports electricity from the Pilot Park to shore at Peterhead, is buried where seabed conditions allow. Where this is not possible cable protection in the form of concrete mattresses and rock is required. Both the inter-array and export cables have 33 kV transfer voltage. The export cable comes ashore at Peterhead and connects to the local distribution network at SSE Peterhead Grange substation. The onshore Project infrastructure comprises an underground cable approximately 1.5 km in length and a small switchgear yard facility close to Peterhead Grange substation.

10.11.3 This project has now finished construction and moved into the operational phase.

10.12 Kincardine Offshore Windfarm Limited (“KOWL”)

10.12.1 KOWL is a proposed demonstrator floating offshore windfarm development that is located to the south east of Aberdeen, approximately eight miles from the Scottish coastline. The development is considered a commercial demonstrator site, which will utilise floating semi-submersible technology to install seven turbines including a temporary data gathering platform of 2 MW. Therefore the turbines will be between 2 and 8 MW capacity. The proposal also includes inter-array cabling to the connection point at the onshore Redmoss substation, Altens, Aberdeen.

10.12.2 A full project description can be found [here](#). Construction works are currently ongoing for this project.

10.13 Historic Environment Scotland – Pier Repairs – Inchcolm Island

Inchcolm Island is located 4 miles east of the Forth Bridge and 1 mile from the Fife coast near Aberdour. The works include repair the lower pier, locally stitching and repointing, replacement of quay slab, bollards, ladders and other quay furniture. The AA concluded that given the duration and location of the works together with the availability of alternate areas and the mobility of the qualifying interests the impact of the works would be negligible. These works are scheduled to be complete by March 2019.

10.14 Inch Cape Offshore Limited – Sediment Sampling

10.14.1 Inch Cape Offshore Limited are undertaking a suite of surveys including boreholes, cone penetration tests and vibrocore sampling to inform the Wind Turbine Generator (WTG) and Offshore Substation Platform (OSP) foundation designs. The works are planned between July 2018 and August 2019.

10.15 Meygen Phase 1 – Pentland Firth

10.15.1 The works involved the construction of an offshore tidal stream electricity generating station located in the Inner Sound of the Pentland Firth. Currently, four three-bladed single rotor horizontal axis turbines have been deployed including foundations, scour protection and cables connecting it to landfall. This turbines are now operational and funding is being sought for the next phase of the works.

10.16 European Offshore Wind Development Centre – Aberdeen Bay Windfarm

10.16.1 The works involve the installation of a windfarm located between 2 and 4.5 km off the coast of Blackdog, consisting of 11 turbines, inter-array and export cables. Construction commenced in November 2017, beginning with foundations and cabling. All construction works have now been completed for this project and it is currently undergoing final testing. The works will be operational until 2032.

10.17 Dredging operations

10.17.1 There are a number of dredging operations which were identified as having a likely significant effect on a designated site which could also be affected by the Edinburgh Marina Granton Harbour Ltd works. The table below summarises these projects.

Table 4 Dredging operations identified as having a likely significant effect on a designated site also affected by the Edinburgh Marina Granton Harbour Ltd works.

Location of Dredge	Amount of Dredge Material	Dredge Spoil Deposit Area	Dates of Licence	Designated Site(s)
Newhaven	27,000 tonnes per year	Oxcars	09 Apr 18 – 23 Jun 19	Firth of Forth SPA, Imperial Dock Lock, Leith SPA, River Teith SAC
Dysart	1,200 tonnes per year	Dysart Harbour	25 Apr 18 – 13 Jul 20	Firth of Forth SPA, Outer Firth of Forth and St Andrews Bay Complex pSPA
Leith	130,000 tonnes per year	Narrow Deep B	15 Feb 18 – 11 Feb 21	Firth of Forth SPA, Forth Islands SPA, Imperial Dock Lock, Leith SPA, Outer Firth of Forth and St Andrews Bay Complex pSPA, River Teith SAC
Rosyth	520,000 tonnes per year	Oxcars	15 Feb 18 – 11 Feb 21	Firth of Forth SPA, Forth Islands SPA, Imperial Dock Lock, Leith SPA, Outer Firth of Forth and St Andrews Bay Complex pSPA, River Teith SAC

Kirkcaldy	17,500 tonnes per year	Kirkcaldy	14 Nov 18 – 13 Nov 21	Firth of Forth SPA, Forth Islands SPA, Outer Firth of Forth and St Andrews Bay Complex pSPA
Port Edgar	3,300 tonnes per year	Plough dredging	10 Jan 19 – 09 Jan 22	Firth of Forth SPA
Pittenweem	14,000 tonnes	Anstruther	22 Jun 18 – 21 Jun 19	Forth Islands SPA, Outer Firth of Forth and St Andrews Bay Complex pSPA

10.18 Assessment of in-combination effects on the Firth of Forth SPA

10.18.1 The following projects have the potential to have a likely significant effect on the Firth of Forth SPA and overlap temporally with the proposed works at Granton:

- Forth Road Bridge Maintenance Works (section 10.2)
- Aberdeen Harbour Expansion Project (section 10.4)
- Levenmouth Demonstration Turbine (section 10.7)
- Royal National Lifeboat Institution (“RNLI”) – Maintenance Works – Kinghorn and North Berwick Lifeboat Stations (section 10.8)
- Hexicon – Dounreay Tri Floating Wind Demonstration Project (section 10.6) Forthwind Offshore Development – Methill (section 10.5)
- Dredging (section 10.17)
 - Dysart
 - Leith
 - Rosyth
 - Kirkcaldy
 - Newhaven
 - Port Edgar

10.18.2 Potential effects on the Firth of Forth SPA from the Edinburgh Marina Granton Harbour Ltd works are likely to come from short term, localised displacement from habitat. The maintenance works that are already licensed within the Firth of Forth are very short term in nature so in the unlikely event that the works do overlap with the Granton Harbour redevelopment, there will be no adverse effect.

10.18.3 The AAs for these projects concluded that there would be no adverse effect on the site integrity of the Firth of Forth SPA either in isolation or in combination with other plans or projects. Provided all projects are carried out

in accordance with the conditions set out in their respective AAs, MS-LOT concludes that there will be no adverse effect on the site integrity of the Firth of Forth SPA in combination with the Edinburgh Marina Granton Harbour Ltd works.

10.18.4 MS-LOT, having considered the possible effects, conclude that the Edinburgh Marina Granton Harbour Ltd proposal in-combination with the other projects listed above will not adversely affect the integrity of the Firth of Forth SPA.

10.19 Assessment of in-combination effects on the Forth Islands SPA

10.19.1 The following projects have the potential to have a likely significant effect on the Forth Islands SPA and overlap temporally with the works at Granton:

- Forth Road Bridge Maintenance Works (section 10.2)
- Aberdeen Harbour Expansion Project (section 10.4)
- Forth and Tay Windfarm Developments (section 10.10)
- Hywind Scotland Pilot Park (section 10.11)
- Hexicon – Dounreay Tri Floating Wind Demonstration Project (section 10.6)
- Forthwind Offshore Development – Methill (section 10.5)
- KOWL (section 10.12)
- Dredging (section 10.17)
 - Leith
 - Rosyth
 - Kirkcaldy
 - Pittenweem

10.19.2 Potential effects on the Forth Islands SPA from the Edinburgh Marina Granton Harbour Ltd proposal are from short term, localised displacement from habitat.

10.19.3 The AAs for these projects concluded that there would be no adverse effect on the site integrity of the Forth Islands SPA either in isolation or in combination with other plans or projects. Provided all projects are carried out in accordance with the conditions set out in their respective AAs, MS-LOT concludes that there will be no adverse effect on the site integrity of the Forth Islands SPA in combination with the Edinburgh Marina Granton Harbour Ltd works.

10.19.4 MS-LOT, having considered the effects, conclude that the Edinburgh Marina Granton Harbour Ltd proposal in-combination with the other projects listed above will not adversely affect the integrity of the Forth Islands SPA

10.20 Assessment of in-combination effects on the Imperial Dock Lock, Leith SPA

10.20.1 The following projects have the potential to have a likely significant effect on the Imperial Dock Lock, Leith SPA:

- Dredging (section 10.17)
 - Leith
 - Rosyth

10.20.2 Birds from the SPA may use the area around Granton harbour for foraging and thus any works here may cause disturbance. Due to the nature of dredging operations, that they occur for short periods within the duration of the licence, it is unlikely that operations will be ongoing at all of the above sites simultaneously. It is therefore logical to conclude that there will always be suitable foraging habitat available and that if in-combination effects do occur, they will not result in adverse effect.

10.20.3 The AAs for these projects concluded that there would be no adverse effect on the site integrity of the Imperial Dock Lock, Leith SPA either in isolation or in combination with other plans or projects. Provided the conditions set out in this AA are complied with MS-LOT concludes that there will be no adverse effect on the site integrity of the Firth of Forth SPA in combination with the Edinburgh Marina Granton Harbour Ltd works.

10.20.4 MS-LOT, having considered the effects, conclude that the Edinburgh Marina Granton Harbour Ltd proposal in-combination with the other projects listed above will not adversely affect the integrity of the Imperial Dock Lock, Leith SPA

10.21 Assessment of in-combination effects on the Outer Firth of Forth and St Andrews Bay Complex pSPA

10.21.1 The following projects have the potential to have a likely significant effect on the Outer Firth of Forth and St Andrews Bay Complex pSPA and overlap temporally with the Edinburgh Marina Granton Harbour Ltd proposal:

- Aberdeen Harbour Expansion Project (section 10.4)
- Levenmouth Demonstration Turbine (section 10.7)
- KOWL (section 10.12)
- Hexicon – Dounreay Tri Floating Wind Demonstration Project (section 10.6)
- Historic Environment Scotland – Pier Repairs – Inchcolm Island (section 10.13)
- Forthwind Offshore Development – Methill (section 10.5)

- Dredging (section 10.17)
 - Dysart
 - Leith
 - Rosyth
 - Kirkcaldy
 - Pittenweem

The impact from the Granton works on the pSPA is likely to come from a temporary effect on food supply and potentially increased noise, though it is likely that a certain degree of habituation already exists. The dredging works are all carried out in campaigns so any temporally overlap with the Granton works will be short and may only involve one or two sites, With regards to the developments at Levenmouth, this is in the operational phase and thus effects on the pSPA are of lower magnitude.

10.21.2 The AAs for these projects concluded that there would be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA either in isolation or in combination with other plans or projects. Provided all projects are carried out in accordance with the conditions set out in their respective AAs, MS-LOT concludes that there will be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA in combination with the Edinburgh Marina Granton Harbour Ltd works.

10.21.3 MS-LOT, having considered the effects, conclude that the Edinburgh Marina Granton Harbour Ltd proposal in-combination with the other projects listed above will not adversely affect the integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA.

10.22 Assessment of in-combination effects on the Isle of May SAC

10.22.1 The following projects have the potential to have a likely significant effect on the Isle of May SAC:

- Aberdeen Harbour Expansion Project (section 10.4)
- Forth and Tay Windfarm Developments (section 10.10)
- Meygen Phase 1 – Pentland Firth (section 10.15)
- European Offshore Wind Development Centre – Aberdeen Bay Windfarm (section 10.16)
- Forthwind Offshore Development – Methill (section 10.5)

10.22.2 The impacts on the Isle of May SAC from the works are possible from the noise generated. The renewable energy developments at Meygen and Aberdeen Bay are in the operation phase and thus underwater noise is no

longer being generated. There may be a small overlap between construction works at NnGOWL and Aberdeen harbour, and the Granton works.

10.22.3 The AAs for these projects concluded that there would be no adverse effect on the site integrity of the Isle of May SAC either in isolation or in combination with other plans or projects. Provided all projects are carried out in accordance with the conditions set out in their respective AAs, MS-LOT concludes that there will be no adverse effect on the site integrity of the Isle of May SAC in combination with the Edinburgh Marina Granton Harbour Ltd works.

10.22.4 MS-LOT, having considered the effects, conclude that the Edinburgh Marina Granton Harbour Ltd proposal in-combination with the other projects listed above will not adversely affect the integrity of the Isle of May SAC.

10.23 Assessment of in-combination effects on the Berwickshire and North Northumberland Coast SAC

10.23.1 The following projects have the potential to have a likely significant effect on the Berwickshire and North Northumberland Coast SAC:

- Aberdeen Harbour Expansion Project (section 10.4)
- Forth and Tay Windfarm Developments (section 10.10)
- Meygen Phase 1 – Pentland Firth (section 10.15)
- European Offshore Wind Development Centre – Aberdeen Bay Windfarm (section 10.16)

10.23.2 The assessment of in-combination effects for this site is similar to that for the Isle of May SAC however in this case, the protected site is further from the site of the works.

10.23.3 The AAs for these projects concluded that there would be no adverse effect on the site integrity of the Berwickshire and North Northumberland Coast SAC either in isolation or in combination with other plans or projects. Provided all projects are carried out in accordance with the conditions set out in their respective AAs, MS-LOT concludes that there will be no adverse effect on the site integrity of the Berwickshire and North Northumberland Coast SAC in combination with the Edinburgh Marina Granton Harbour Ltd works.

10.23.4 MS-LOT conclude that the Edinburgh Marina Granton Harbour Ltd proposal in-combination with the other projects listed above will not

adversely affect the integrity of the Berwickshire and North Northumberland Coast SAC.

10.24 Assessment of in-combination effects on the River Teith SAC

10.24.1 The following projects have the potential to have a likely significant effect on the River Teith SAC:

- Forth and Tay Windfarm Developments (section 10.10)
- Meygen Phase 1 – Pentland Firth (section 10.15)
- Dredging (section 10.17)
 - Leith
 - Rosyth

10.24.2 The AAs for these projects concluded that there would be no adverse effect on the site integrity of the River Teith SAC either in isolation or in combination with other plans or projects. Provided all projects are carried out in accordance with the conditions set out in their respective AAs, MS-LOT concludes that there will be no adverse effect on the site integrity of the River Teith in combination with the Edinburgh Marina Granton Harbour Ltd works.

10.24.3 MS-LOT, having considered the effects, conclude that the Edinburgh Marina Granton Harbour Ltd proposal in-combination with the other projects listed above will not adversely affect the integrity of the River Teith SAC.

11 MS-LOT Conclusion

11.1 MS-LOT conclude that providing the conditions listed in section 12 are adhered to, there will be no adverse effect on the site integrity of the Firth of Forth SPA, the Forth Islands SPA, the Imperial Dock Lock, Leith SPA, the Outer Firth of Forth and St Andrews Bay Complex pSPA, the Isle of May SAC, the Berwickshire and North Northumberland Coast SAC or the River Teith SAC from the redevelopment works at Granton Harbour either in isolation or in-combination with other projects.

SECTION 4: CONDITIONS

12 Conditions required

12.1 The licensee must ensure that all measures listed in the Schedule of Mitigation submitted as part of the Environmental Impact Assessment (“EIA”)

Report are implemented throughout the works to address significant environmental effects.

- 12.2 The licensee must submit a Construction Environment Management Plan (“CEMP”) to the licensing authority for their written approval at least two months prior to the commencement of works, or less if agreed by the licensing authority. In the event that the licensee wishes to amend or update the CEMP, the licensee must submit, in writing, details of proposed updates or amendments to the licensing authority for their written approval, no later than two months, or at such time as agreed by the licensing authority, prior to the planned implementation of the proposed updates or amendments. It is not permissible for any works associated with the proposed updates or amendments to proceed prior to the granting of such approval. The CEMP must be consistent with the application and supporting information and must address but not be limited to:
- a) Mitigation measures to prevent significant adverse impacts to environmental interests including protected areas and features, as identified in the application and supporting information
 - b) Adherence to good practice measures including Guidance for Pollution Prevention.
- 12.3 The licensee must ensure that works are carried out in accordance with the Marine Mammal Protection Plan (issued 28 September 2018). In the event that the licensee wishes to amend or update the MMPP, the licensee must submit, in writing, details of proposed updates or amendments to the licensing authority for their written approval, no later than two months, or at such time as agreed by the licensing authority, prior to the planned implementation of the proposed updates or amendments. It is not permissible for any works associated with the proposed updates or amendments to proceed prior to the granting of such approval.
- 12.4 The licensee must ensure that the marine mammal observer protocol as detailed in the MMPP is used whenever possible and that piling works during sea states exceeding 4 and during periods of darkness and/or low visibility are minimised.
- 12.5 The licensee must ensure that where practicable, works are carried out at times of day which avoid low-tide feeding activity in order to minimise disturbance to birds.