



Written Statement

RSPB Scotland

Grangemouth Flood Protection Scheme

16 December 2025

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1. Introduction

- 1.1. This Written Statement is submitted on behalf of Royal Society for the Protection of Birds Scotland (“RSPB Scotland”). It relates to the proposed development of the Grangemouth Flood Protection Scheme (“the Proposed Scheme”), in Falkirk.
- 1.2. This statement contains:
 - Clarification of which parts of our objection remain outstanding, namely: the potential impacts of the Proposed Scheme on the Firth of Forth Special Protection Area (“SPA”); the Firth of Forth Site of Special Scientific Interest (“SSSI”) and Firth of Forth Ramsar site.
 - Particulars of the case that is to be made at the hearing.
 - A list of documents to which RSPB Scotland may wish to refer at the Hearing, (Appendix 1) We have numbered these RSPB 1 through to RSPB 26 in the text below.
- 1.3. This Written Statement should be read in conjunction with the documents already submitted by RSPB Scotland to Falkirk Council in relation to the Proposed Scheme. In particular, reference should be made to:
 - Letter dated 15th June 2024 from RSPB Scotland to Falkirk Council (RSPB 8)
 - Letter dated 21st January 2025 from RSPB Scotland to Falkirk Council (RSPB 9)
- 1.4. The Written Statement will focus on the potential impacts of the Proposed Scheme on the Firth of Forth SPA; the Firth of Forth SSSI and Firth of Forth Ramsar site.
- 1.5. RSPB Scotland is part of the RSPB, UK’s largest nature conservation charity, protecting and restoring habitats, saving species and helping to tackle the nature and climate emergency. For over a century we’ve been a voice for birds and the natural world, inspiring and influencing millions through conservation, powerful partnerships and campaigning. Our network of over 200 nature reserves, 77 of which are in Scotland, sits at the heart of our world-leading science and conservation delivery. We play a leading role in BirdLife International, a worldwide partnership of nature conservation organisations. We want to see a world where wildlife, wild places and all people thrive.
- 1.6. RSPB Scotland manages its Skinflats nature reserve on the Firth of Forth. This includes a lease of approximately 355 ha of intertidal habitat, which is immediately adjacent to part of the Proposed Scheme (please see map, Appendix 3). The key group of species for which the reserve is managed are passage and wintering wildfowl and wading birds, connected to the Firth of Forth SPA, SSSI and Ramsar Sites (please see Appendix 2 for full list of species). The reserve is publicly accessible but not proactively promoted for visitors, to try and ensure disturbance to wildlife is minimised. We have worked in the area around the Proposed Scheme for over twenty years.
- 1.7. In 2012, RSPB Scotland, in partnership with a range of organisations, including Falkirk Council, produced a feasibility study which identified significant opportunities for wetland habitat creation and enhancement across the Inner Forth (RSPB 1). More recently RSPB Scotland has been closely involved with Falkirk Council and seven other partners including NatureScot, as part of the Inner Forth Futures partnership (RSPB 2) which aims to make the Inner Forth a better place to live, work, visit and invest in, by helping to promote its natural and cultural heritage, and sustainable transport options. We also want to support communities so that they feel confident to take a greater role in managing and promoting the area’s heritage for themselves.

- 1.8. RSPB Scotland recognises the need for flood protection schemes, and the need to mitigate the effects of climate change. However, all such schemes must be carefully designed and sited to ensure they do not result in unacceptable impacts on nature.

2. Summary of the Proposal

- 2.1. We note that the proposed Grangemouth Flood Protection Scheme includes the following elements:
- Flood defence walls and embankments;
 - Flood gates and demountable flood barriers;
 - Modification to lock gates within the Port of Grangemouth;
 - Drainage works including new and enhanced drainage and pumping stations;
 - Replacement bridges and raised/ modified bridges and culverts;
 - Erosion protection measures; and
 - Utility and service diversion.
- 2.2. Due to the location and nature of the Proposed Scheme, it will have Likely Significant Effects on the Firth of Forth SPA and its species. As required by the Conservation (Natural Habitats &c.) Regulations 1994 (“the Habitats Regulations”) Falkirk Council, as the competent authority, is required to carry out an Appropriate Assessment of the implications of the Proposed Scheme for the SPA and its species in view of the site’s Conservation Objectives. The competent authority shall only undertake or give any consent, permission or other authorisation for, a plan or project after having ascertained that it will not adversely affect the integrity of the Firth of Forth SPA. In this case, Falkirk Council (as Applicant) has carried out an Appropriate Assessment and concluded that potential adverse effects on the integrity of the SPA cannot be ruled out, as a result of disturbance to 11 of the Firth of Forth SPA/Ramsar site qualifying species during construction and maintenance works. This is set out in the Grangemouth Flood Protection Scheme 2025 Habitats Regulations Appraisal (“HRA”) (RSPB 3).
- 2.3. The Applicant has concluded that there are no alternative solutions that would meet the objectives of the project and there are Imperative Reasons of Overriding Public Interest (“IROPI”). As such, they are seeking a derogation under the Habitat Regulations and have proposed compensation measures.

3. Timeline and background

- 3.1. The below timeline sets out the key stages and points of engagement:

- Oct 2018	RSPB Scotland consulted on the Scoping Report for the Proposed Scheme.
- 15 th Feb 2019	RSPB Scotland submits a response to the Scoping Report to Falkirk Council.
- 26 th March 2020	Meeting between RSPB Scotland and Falkirk Council and their consultants to discuss the Proposed Scheme and RSPB Scotland’s response to the Scoping Report.
- 6 th Dec 2022	Meeting between RSPB Scotland and Falkirk Council and their consultants, and NatureScot, instigated by RSPB Scotland to discuss RSPB Scotland’s concerns with the Proposed Scheme.

- Jan 2024 Falkirk Council's Executive Committee decides to move forward with the statutory notification of the Proposed Scheme and the Council began the process to seek the necessary powers under the Flood Risk Management (Scotland) Act 2009 to allow them to implement the scheme.
- 4th March 2024 RSPB Scotland attends in person stakeholder event.
- 9th May 2024 Falkirk Council publishes documentation for the Proposed Scheme for consultation.
- 15th June 2024 RSPB Scotland submits a letter of objection to the Proposed Scheme to Falkirk Council.
- 30th September 2024 A Draft Habitats Regulations Appraisal dated September 2024 was issued to RSPB Scotland.
- 21st Jan 2025 RSPB Scotland submits an amended letter of objection to the Proposed Scheme.
- 23rd Jan 2025 Members at the Falkirk Council Executive Committee take a decision to confirm the Proposed Scheme without modification. The Council notifies Scottish Ministers of this decision.
- 27th March 2025 Scottish Ministers notify Falkirk Council that they will not be 'calling in' the Proposed Scheme.
- 3rd September 2025 RSPB Scotland is issued a copy of the Habitats Regulations Appraisal for the Proposed Scheme, dated August 2025 (RSPB3).
- 24th November 2025 RSPB Scotland receives timescale for Hearing and notified when hearing statement is required.
- 8th December 2025 RSPB Scotland is notified of Hearing date of 28th January 2026.

3.2. From the outset of the consultation and engagement process for the Proposed Scheme, we have made requests to be involved in discussions around its potential ecological impacts; and offered to support the Applicant and their consultant by providing relevant information. Disappointingly, neither the Applicant (Falkirk Council) nor their consultant (Jacobs) have responded positively to these requests. As a result, we have had to ask repeatedly to be involved in discussions, and when we have tried to offer information or ask for an update, we have often received late or no responses.

3.3. Therefore, despite a number of requests we have not had an opportunity to speak directly to the Applicant or their consultants since December 2022. Though we attended a stakeholder event in 2024, this presented limited opportunity to discuss the details of the Proposed Scheme or our concerns. To be excluded during engagement and consultation processes in this way has inevitably meant we have been unable to resolve concerns prior to the formal objection stage. Please see Appendix 4 for a fuller timeline of engagement and correspondence. At the time of submitting this statement, following further requests from us, Falkirk Council and NatureScot have agreed to a meeting in January 2026, the date is still to be confirmed.

- 3.4. We believe that our reasons for objection could be resolved, and RSPB Scotland has always been willing to work with Falkirk Council as the Applicant to try to do so, particularly in terms of the design of appropriate mitigation measures and provision of suitable compensation measures.

4. Conservation importance of the Application Site

- 4.1. The following protected sites fall within or are adjacent to the Application Site. These international and national designations due to the importance of area for birds:

- Firth of Forth SPA;
- Firth of Forth Ramsar site;
- Firth of Forth SSSI; and
- The site is also adjacent to RSPB's Skinflats reserve, which is managed for nature.

The Firth of Forth SPA

- 4.2. The Firth of Forth SPA is designated for its passage wintering wildfowl and waders, and passage Sandwich Terns *Sterna sandvicensis*. The SPA covers 6,317.93 ha and is made up of estuarine and coastal habitats, spanning from Alloa in Clackmannanshire in the west to the coastal areas of East Lothian and Fife (RSPB 4a).
- 4.3. The area of the SPA within close proximity to the Proposed Scheme holds some of the largest populations of qualifying species across the SPA. Table 4.2 of the HRA for the Proposed Scheme (RSPB 3), sets out the numbers of each SPA species which use the habitat within the study area. It identifies that the survey area around the Proposed Scheme supports over 25% of the cited SPA populations of eight of the qualifying species – Dunlin, Shelduck, Knot, Ringed Plover, Redshank, Bar-tailed Godwit, Wigeon and Curlew, along with a smaller percentage of other species. This makes it an extremely important area in the context of a large, estuarine SPA.
- 4.4. The qualifying species use the area around and within parts of the Proposed Scheme for feeding (primarily the mudflats and shallow estuarine waters) and roosting (natural and built shoreline and saltmarsh).
- 4.5. Site condition monitoring of the SPA carried out by NatureScot undertaken in 2018 (RSPB 4) shows that of the eight qualifying species mentioned above, Dunlin is in favourable declining condition and Knot is in unfavourable declining condition. The others are favourable maintained.
- 4.6. The Conservation Objectives (RSPB 4b) of the Firth of Forth SPA are:
- To avoid deterioration of the habitats of the qualifying species 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 Forth SSSI

- 4.7. The Firth of Forth SSSI underpins the Firth of Forth SPA and includes the suite of wintering waders and wildfowl. Also included within the SSSI designation area are intertidal marine habitats, coastlands, grasslands, vascular plant assemblages, beetle assemblage, Northern

Brown Argus (*Aricia Artaxerxes*) and breeding birds: Eider (*Somateria mollissima*); Shelduck (*Tadorna tadorna*) and Ringed plover (*Charadrius hiaticula*) (RSPB 5).

Firth of Forth Ramsar site

- 4.8. The area is designated as the Firth of Forth Ramsar Site for populations of wintering waders and wildfowl (RSPB 6). The Conservation objectives and qualifying species are the same as for the Firth of Forth SPA. In July 2025 the Scottish Government updated the policy (RSPB 7) on the protection of Ramsar sites in Scotland meaning that they should be treated as if they were European sites for the purposes of land use change decision making. Therefore, a HRA will be required in relation to the Ramsar Site as well as the SPA.

RSPB Scotland's Skinflats Nature Reserve

- 4.9. The site of the Proposed Scheme is also immediately to the south-east of RSPB Scotland's Skinflats nature reserve (please see map, Appendix 3), which was acquired and is managed to safeguard wintering wildfowl and waders.
- 4.10. RSPB Scotland has been successfully managing this and other sites for wintering wildfowl and waders for decades. At Skinflats and nearby RSPB Scotland's Black Devon Wetlands nature reserve, we have undertaken a range of measures over the past 15 years to enhance both sites for these species, including creating shallow wetland pools, wetland channels and new intertidal habitat.

5. Habitats Regulations Assessment & General Duties

SPA tightly drawn boundaries

- 5.1. It is important to note that the UK has transposed and implemented Article 4, the Birds Directive (RSPB 16) through the creation of SPAs only, and therefore its approach to SPAs is relevant.
- 5.2. It is therefore worth noting here that unlike other countries, the UK does not include any buffer zones in and around its SPAs (nor its SACs and Ramsar sites) and therefore everything within those sites is included for ecological reasons.

The Habitats Regulations

- 5.3. As the Applicant has done, in relation to plans and projects *likely to have an effect* on a European site (SPA and/or SAC), the Habitats Regulations require a sequence of steps to be taken by the competent authority when considering consent including, on a precautionary basis, carrying out an appropriate assessment of the implications for the SPA and its species in view of its Conservation Objectives, taking account any conditions or restrictions subject to which that consent might be given ("the Integrity Test").
- 5.4. As is the case here, where it has not been possible to ascertain that there will not be adverse effects on the integrity of the site, consideration must be had of possible alternative solutions to the Proposed Scheme and whether there are IROPI (which, subject to regulation 64(2), may be of a social or economic nature). Only if the competent authority is satisfied that there are no alternative solutions, and the project must be carried out for IROPI and crucially for here compensation measures are secured to ensure that the overall coherence of the UK Sites Network is protected, may it agree to the project notwithstanding a negative assessment of the implications for the European site.

SPA Conservation Objectives

- 5.5. Under the Habitats Regulations, a site's Conservation Objectives are intrinsic to the Integrity Test when considering whether to grant consent for a plan or project – see Habitats Regulations 48(1).
- 5.6. In order to understand the Conservation Objectives in the context of Regulation 48(1) it is important to note the role of SPAs, namely in order to ensure that their contribution to national and international “conservation status” of the species is maximised.
- 5.7. The Conservation Objectives are to be an articulation of the contribution that it is appropriate for the SPA to make in an enduring way. It would be inconsistent with the purposes of the protection and the role of SPAs to have SPA Conservation Objectives (or the interpretation of them) aiming for lower populations.
- 5.8. It is essential to highlight that all these objectives are important and should be considered as part of the appropriate assessment. This includes the avoidance of any deterioration of the habitats used by qualifying species. However, due to the nature of the proposed development, the distribution of the species within site, the distribution and extent of habitats supporting the species and the need to ensure no significant disturbance of the species, are particularly key.

Habitats Regulations General Duties

- 5.9. The Habitats Regulations (RSPB 15) also have the following duties relevant to the consideration of the Application:
 - Regulation 3 states:

“(1) The Scottish Ministers, the appropriate nature conservation body and, in relation to the Scottish marine area, a competent authority must exercise their functions which are relevant to nature conservation, including marine conservation, so as to secure compliance with the requirements of the Directives. [the Birds and Habitats Directives].”
 - And Regulation 3A Duties in relation to wild bird habitat states:

“(2) Except in relation to the Scottish marine area, the Scottish Environment Protection Agency, the Forestry Commissioners, local authorities and National Park authorities must take such steps in the exercise of their functions as they consider appropriate to contribute to the achievement of the objective in paragraph (3) so far as lies within their powers....

...(3) The objective is the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in Scotland in implementation of Article 3 of the Wild Birds Directive (including by means of the upkeep, management and creation of such habitat, as appropriate), having regard to the requirements of Article 2 of that Directive.”
- 5.10. Section 12 of the Nature Conservation (Scotland) Act 2004 (RSPB 14) requires public bodies to further the conservation and enhancement of protected natural features and to maintain and enhance the representative nature of SSSI series as a whole.

6. RSPB Scotland's objection

- 6.1. RSPB Scotland objected to the Proposed Scheme in our letter dated 15 June 2024 during the formal consultation period for a number of reasons (RSPB 8). On 21 January 2025 RSPB Scotland again wrote to Falkirk Council setting out the remaining reasons for objection (RSPB 9). This letter confirmed that one of the reasons for the original objection had been resolved, namely,

“Insufficient information to allow us to properly respond to the potential impacts on the Firth of Forth SPA”. This followed Falkirk Council making available the Habitats Regulation Assessment (dated Sept 2024) which addressed this point. Therefore, the remaining reasons for RSPB Scotland’s objection to the Proposed Scheme are:

- Insufficient information to demonstrate that alternative solutions have been fully considered;
- Lack of proper consideration of available mitigation measures to reduce negative impacts on the designated sites; and
- The proposed ecological compensation measures are inappropriate compensation for the effects of the Proposed Scheme on site integrity and, in any event, they are inadequate.

- 6.2. It is RSPB Scotland’s intention to focus on the second and third reasons for objection at the hearing.

Definition of disturbance

- 6.3. Given its importance in this Hearing Statement, it is useful to define what is RSPB Scotland means by disturbance and the implications it has on the bird species of the protected sites.
- 6.4. Disturbance can occur naturally, for example when predators approach potential prey. However, for the purposes of this Written Statement disturbance will focus on anthropogenic disturbance. This disturbance occurs where human activity influences a bird’s behaviour or survival. The presence of people along an estuary such as the Forth will influence birds in many ways. For the majority of wildfowl and wading species, people and/or dogs and certain types of machinery or vehicles are, or are perceived to be, a potential threat. Therefore, the response to such a threat can be expected to be that the birds change their behaviour, for example by taking flight. Disturbance can be visual, for example a human being seen on an embankment above where the birds are feeding or roosting, or audible, for example the noise of a wildfowler’s shotgun going off. Such a change in behaviour will have costs to the bird, such as loss of feeding time or expenditure of energy in flying away. Whether a bird changes behaviour and responds to the threat will relate to the perceived scale of the threat. Disturbance can result in the displacement of species from an area altogether (RSPB 10 and RSPB 11).

Lack of proper consideration of available mitigation measures to reduce negative impacts on the designated sites

- 6.5. The Applicant’s HRA has recognised that the Proposed Scheme could result in disturbance/displacement to roosting birds for a number of Firth of Forth SPA/Ramsar site qualifying species. They state that:

“Timing works to fully avoid disturbance impacts during sensitive periods is not considered possible due to the large-scale nature of the Scheme. In addition, visual screens high enough to fully conceal all works from qualifying species are not practical. Screens 2m in height will be installed at relevant locations along the estuary frontage to minimise effects by reducing the visual/noise impacts, in conjunction with other mitigation measures.” (Table 4.18, RSPB 3)

- 6.6. As such, the Applicant has concluded that adverse effects on the SPA’s site integrity cannot be ruled out during construction and maintenance works. We agree with this conclusion for the Proposed Scheme, however, we are of the view that further mitigation measures could be put in place to avoid almost all of the adverse effects on site integrity.

- 6.7. Undertaking the construction work outside the autumn and winter period (October – March inclusive), when the SPA’s wildfowl and waders are largely absent would be expected to significantly reduce the likelihood of construction disturbance on the SPA species.
- 6.8. Table 1 of NatureScot’s guidance document ‘Habitats Regulations Appraisal (HRA) on the Firth of Forth - A Guide for developers and regulators’ notes that mitigation for construction disturbance could include timing, *“construction to avoid peak times that qualifying features are present”* (Table 4, RSPB 10).
- 6.9. Whilst we understand that the Proposed Scheme is large and complex and restricting the working period is likely to be difficult, this is not in itself sufficient reason for this not to be considered more fully. We do not believe that enough information has been provided to show whether this approach is not possible, beyond stating that it would be difficult. Therefore, we have objected to the Proposed Scheme due to the lack of full consideration of construction restrictions to avoid the most sensitive months, based on the Proposed Scheme information available. It is notable that the Musselburgh Flood Protection Scheme, which is currently progressing through the decision-making process, has stated that construction along the seawall – which boundaries the Firth of Forth SPA - would only be carried out during summer months (approximately April to Sept) to reduce the impacts on the SPA (RSPB 12).

The proposed ecological compensation measures are inappropriate compensation for the effects of the Proposed Scheme on site integrity and, in any event, they are inadequate

- 6.10. Section 4.11 of the Applicant’s HRA (Section 4.11, RSPB 3) concludes that adverse effects on the site integrity of the Firth of Forth SPA and Ramsar site cannot be discounted. Section 8.1 of the HRA states that, *“compensatory measures must therefore be taken to ensure that the overall coherence of the European site network is protected”*. We welcome the Applicant’s acceptance of these potential adverse effects and do not disagree with the principle of providing off-site habitat management for these species as compensation for the impacts of the Proposed Scheme. However, RSPB Scotland has three significant concerns with the compensation measures proposed, which are discussed in detail below. In summary:
- The proposed compensation measures are within the impacted Firth of Forth SPA.
 - The proposed compensation measures are not additional to ongoing conservation and management obligations; and
 - The proposed measures will not function as compensation for the adverse effects on the SPA and its species.

The proposed compensation measures are within the impacted Firth of Forth SPA

- 6.11. The Applicant proposes that compensatory work be undertaken at two sites - Kinneil Lagoons and Bothkennar Pools. Both of these areas are within the Firth of Forth SPA.
- 6.12. Compensation for adverse effects on SPAs should only be provided outside of SPAs. SPA boundaries are tightly drawn and therefore everything within SPAs is ecologically justified (see 6.2 above). Any conservation or restoration measures for the SPA’s qualifying species should be being done anyway as part of the protection and management of the SPA to achieve its conservation objectives (see 6.10 and 6.11 above).
- 6.13. Section 8.2.1 of the Applicant’s HRA (Section 8.2.1, RSPB 3) notes that:

“Avoidance of provision of compensatory measures within an SPA is typically adopted where functionally supporting habitats could be adversely affected, however the proposed works are

either in areas which are currently non-functional for the qualifying features involved, or will significantly enhance the quality of existing habitat.”

6.14. We do not agree with this interpretation. The avoidance of provision of compensatory measures within an SPA is to ensure that the overall network is protected and that there is not a gradual erosion of protected areas, with compensation for loss increasingly being concentrated in a smaller and smaller area of the SPA site network.

6.15. NatureScot’s document “European Site Casework Guidance: How to consider plans and projects affecting Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)” (Section 8.5, RSPB 13) summarises the EU Commission’s guidance that compensatory measures are likely to include:

- designation of an alternative site;
- extension of the same or another site to include habitat equivalent to that lost or damaged; and/or
- restoration of non-qualifying habitat to qualifying standard on this or another site.

6.16. It is notable that Nature Scot’s Guidance does not include enhancement of the existing SPAs or land within the SPA as possible compensation. The focus is on ensuring that there is not an overall loss or degradation of the SPA nor the UK Sites Network. Current non-designated areas should be used to compensate for the loss of the habitats within the SPA and impacts on its species. The Applicant’s proposed compensation, within the SPA, in areas currently used as roosting sites is inadequate and inappropriate.

[The proposed compensation measures are not additional to ongoing conservation and Management Obligations](#)

6.17. Kinneil Lagoons and Bothkennar Pools are owned by Falkirk Council and are part of the Firth of Forth SSSI, as well as the Firth of Forth SPA and Ramsar Site.

6.18. Falkirk Council as a public body, has an existing duty to maintain and enhance its landholdings that fall within the designated areas at Bothkennar Pools and Kinneil Lagoons. Therefore, as an Applicant, Falkirk Council should not be proposing to undertake work on these sites as compensation for adverse effects on site integrity on another part of the SPA. This is particularly significant in relation to Bothkennar Pools, where there are a number of issues with the functional quality of the existing site in terms of supporting the SPA qualifying species. As the HRA (RSPB 3) notes, this includes reed growth, which is reducing the available habitat for feeding and roosting birds.

6.19. RSPB Scotland has undertaken a significant amount of preparatory work to try to ensure that Kinneil Lagoons and Bothkennar Pools are improved for the qualifying species of the SPA. At Kinneil Lagoons, as part of the Inner Forth Landscape Initiative (RSPB 17) RSPB Scotland, alongside Falkirk Council, prepared a Management Plan intending to cover 2014-2018 and a Maintenance Plan intending to cover 2018-2028 (RSPB 18) (a “Management and Maintenance Plan”). Minor elements of recommended work were progressed, including some scrub removal, but funding and permissions were not forthcoming to undertake the majority of the work and so the Management and Maintenance Plan was not delivered. However, we note that scrub removal and improvement to the spit jutting into the lagoon was recommended in the Management and Maintenance Plan at the location where the compensation for the Proposed Scheme is being proposed.

- 6.20. For Bothkennar Pools, RSPB Scotland prepared a Site Management Proposal, which was sent to Falkirk Council in 2011 (RSPB 19). Since then, we have worked alongside Falkirk Council to improve Bothkennar Pools, including recently advising on work to the reedbed and to the northern pool (working with Lesley Sweeney, the Council's Access Ranger).
- 6.21. It is crucial to recognise that improvement works for qualifying species at both Kinneil Lagoons and Bothkennar Pools have been planned for some time but have not been delivered. The Applicant's HRA (Section 8.2.1 RSPB 3) notes that "*Compensatory measures have been developed in close consultation with NatureScot experts.*" Given the expertise that RSPB Scotland has and the amount of work undertaken over the past 10 years in regards efforts to improve conditions for SPA birds, including in close partnership with Falkirk Council, it is very disappointing that our organisation was not involved in developing the compensation measures. Falkirk Council has a duty and should undertake these measures as the landowner and public body, so delivering works as compensation on these sites is not appropriate.

[The proposed measures will not function as compensation for the adverse effects on the SPA and its species](#)

[Reduction in number of roost sites](#)

- 6.22. The SPA qualifying species at risk of displacement from the Grangemouth Flood Protection Scheme currently use three main roosts sites in the immediate area: Grangemouth, Kinneil Lagoons and Bothkennar Pools. The works associated with the Proposed Scheme are likely to remove or reduce the viability of the roost(s) at Grangemouth. Seeking to provide measures to compensate for the loss of this roosting area at the other two existing roosts, would result in an overall loss of roost options. This is important, as there are likely to be times when birds need to move between roost sites, for example - as discussed below - when one or more roosts are disturbed. If a key roost site is unavailable, then birds are likely to spend more time in flight or otherwise expending energy, potentially leading to their survival rate being lowered. Clearly there is a reason that at certain times, some of the qualifying species currently use the roosting areas that will be affected by the Proposed Scheme in preference to the roosts at Kinneil Lagoons and Bothkennar Pools. This is even alluded to in Section 8.4 of the Applicant's HRA, which says:

"Birds can move around/between estuaries through the winter period, depending mainly on cold weather conditions, food availability and levels of disturbance. Therefore, it is essential to maintain a network of suitable sites, offering sufficient foraging resource and roosting habitat which is not excessively disturbed." (Section 8.4 RSPB 3)

- 6.23. It is often difficult to understand the reasons for habitat preference and predict the usage of the estuary by different individual birds and species (RSPB 20), so it is simplistic to assume that creating habitat or undertaking habitat improvement works on existing roost areas, will sufficiently compensate for loss of a currently viable roost by increasing capacity or suitability of that roost. The Applicant's HRA (RSPB 3) provides little evidence to show what is currently limiting usage of the proposed compensatory roost sites, which means that the effectiveness of the proposed works to increase the number of birds that they can support is uncertain.

[Disturbance to existing roost sites](#)

- 6.24. Even if the proposed measures at Kinneil Lagoons and Bothkennar Pools were to be effective in increasing their functional size, the roosting birds use of these sites may be limited as a result of disturbance impacts.

- 6.25. Section 8.4 of the Applicant's HRA notes that "*The best roost sites are undisturbed*" (Section 8.4 RSPB 3). This is not the case with Kinneil Lagoons and Bothkennar Pools, where the compensatory work is proposed, as both suffer from regular disturbance (Mike Bell WeBs Recorder, pers comm and RSPB Scotland staff observations). At Kinneil Lagoons the disturbance is primarily from visitors, including dog walkers, moving along the embankment between the lagoons and the estuary. The distance from the embankment to the southern edge of the lagoon, where the compensation work is proposed, appears to lower the risk of disturbance to a degree, nevertheless, birds across the site will frequently respond by either alerting or taking flight. Disturbance to birds nearer to the embankment can then cause a disturbance reaction from birds further away. There are also occasional incidents where birds are disturbed from walkers/dog walkers accessing the southern side of the lagoon, near where the proposed island works are being created (at NS 96322 81098 and particularly at NS 96975 80989). The issue of disturbance was raised in the Management and Maintenance Plan referred to above (Table 2.3 RSPB 18).
- 6.26. The disturbance at Bothkennar Pools is largely from walkers/dog walkers, walking along the core path to the west of the lagoons. Whilst some screening is provided by trees and hedges, there are substantial gaps in this and birds will frequently be disturbed by people passing by, particularly at the southern pool. In addition to this, there are occasional disturbance incidents when walkers go along the access track to the south of the pool. There is also disturbance from wildfowling (shooting quarry species) on the other side of the seawall, less than 100 m from the north pool and around 300 m from the south pool.
- 6.27. There is no recognition of the risks of disturbance to the compensatory sites in the Applicant's HRA (RSPB 3). If the birds are disturbed at these sites during the construction period of the Proposed Scheme, and they no longer have the Grangemouth roosts to relocate to, they will be at greater risk of the negative effects that disturbance can have on physical condition etc. This means that the proposed compensation fails in the requirements of the compensation to ensure that the overall coherence of the European site network is protected.

Feasibility and maintenance

- 6.28. The proposed compensation must be adequately maintained at both proposed sites for the period at which any disturbance to the SPA occurs as a result of the Proposed Scheme. We have received commitments from Falkirk Council as the Applicant that the compensation works will be maintained but we wish to note that we remain concerned as to whether Falkirk Council has the resources to do this, particularly as there appear to be current plans to reduce their ranger staff, who have responsibility for delivery of these type of works. In particular, the creation of islands at Kinneil Lagoons is likely to create a significant management issue for Falkirk Council. As we have had direct experience of on our reserves, if islands like this are not intensively managed, then they can quickly become covered in scrub. If this happens, then not only do the islands themselves become unusable by the qualifying species but the area around them can be negatively affected, as the birds tend to avoid sites where lines of sight are impeded by vegetation (RSPB 21). We are not reassured that Falkirk Council will deliver the ongoing maintenance required.

Other suitable compensatory sites

Location of compensatory sites

- 6.29. Section 8.2.1 of the Applicant's HRA notes that *"The overriding consideration when identifying suitable compensatory roosting habitat location(s) is consequently proximity to the location at which the original disturbance is thought most likely to occur, whilst being sufficiently far from the source of disturbance for it to no longer be an effect."* (Section 8.2.1 RSPB 3)
- 6.30. We do not agree that proximity to the location of the original disturbance should be the overriding consideration. Instead, it is our expert opinion that the ecological suitability of the area proposed to deliver the compensation requirements for the impacts on the qualifying species must be the overriding consideration. As the Applicant's HRA notes, an important factor in the selection of roost sites by the qualifying species appears to be proximity of the roost sites to suitable feeding habitat (RSPB 22).
- 6.31. Given the number of suitable alternative feeding areas across the SPA, including the mudflats at Skinflats to the north of the Proposed Scheme, it does not follow that the compensatory sites need to be within close proximity to the source of the original disturbance. Also, whilst proximity to suitable feeding habitat is important, the qualifying species are mobile and can travel a number kilometres from suitable roosting sites to feeding areas, so it is not necessarily the case that the compensatory sites must be in very close proximity to the location of the disturbance (RSPB 23).

Alternative compensation sites

- 6.32. On a number of occasions, RSPB Scotland has highlighted to the Applicant the potential for alternative or additional compensation sites that do not fall within the SPA, and we are disappointed that these have not been examined further. A study undertaken by RSPB Scotland in partnership with Central Scotland Green Network, SEPA and SNH (now NatureScot) (RSPB 1) identified a number of sites where work could be undertaken to improve existing habitat or create new habitat for qualifying species within 2-6 km of the Proposed Scheme but outside of the SPA boundary. This included areas immediately to the north of the proposed compensation site at Bothkennar Pools. These sites would be in close proximity to feeding areas which, as discussed previously, appear to be an important factor in roost selection by qualifying species.
- 6.33. Studies into a natural flood protection scheme at Airth (approximately 5.5 km from the development), have indicated the potential to create large areas of new intertidal habitat, benefitting qualifying species of the SPA, whilst also addressing coastal flood risk to the town of Airth (RSPB 24). It is our understanding that a scheme like this could deliver these multiple benefits to the local community, while also appropriately compensating for the SPA impacts associated with this development. Furthermore, it could provide an opportunity to deliver the significant biodiversity enhancements that are required for the Proposed Scheme under National Planning Framework 4, Policy 3.
- 6.34. If there is an insurmountable barrier to delivery of the Airth works as compensation, we have also identified other similar schemes that we are of the opinion, would also deliver the required habitat creation outwith the SPA.
- 6.35. If a decision is made to grant consent for the Proposed Scheme, adequate and meaningful compensation must be secured, which we believe can be provided at a number of sites, including those mentioned above.

Appendix 1: RSPB Scotland General List

Number	Full reference
RSPB 1	RSPB (2012) Inner Forth Futurescape Feasibility Study: Final Report. Unpublished report to RSPB Scotland, CSGN and SNH
RSPB 2	Inner Forth Futures. Available at: https://www.innerforthlandscape.co.uk/ (Accessed 15.12.25)
RSPB 3	Falkirk Council (2025) Grangemouth Flood Protection Scheme. Available at: Habitat Regulations Appraisal August (Accessed 15.12.25)
RSPB 4	NatureScot (2023) Firth of Forth SPA. Available at: SiteLink - Firth of Forth SPA (Accessed 15.12.25)
RSPB 4a	NatureScot (2018) Citation for SPA – Firth of Forth. Available at: https://www.nature.scot/sites/default/files/special-protection-area/8499/spa-citation.pdf (Accessed 15.12.25)
RSPB4b	NatureScot (undated) Conservation Objectives for Firth of Forth Special Protection Area. Available at: https://www.nature.scot/sites/default/files/special-protection-area/8499/conservation-objectives.pdf (Accessed 15.12.25)
RSPB 5	NatureScot (undated) Firth of Forth SSSI. Available at: SiteLink - Firth of Forth SSSI (Accessed 15.12.25)
RSPB 6	NatureScot (undated) Firth of Forth RAMSAR. Available at: SiteLink - Firth of Forth RAMSAR (Accessed 15.12.25)
RSPB 7	The Scottish Government (2025) Updated Scottish Government policy on protecting Ramsar sites. Available at: Updated Scottish Government policy on protecting Ramsar sites (Accessed 15.12.25)
RSPB 8	RSPB Scotland objection to the Proposed Scheme letter dated 15 June 2024
RSPB 9	RSPB Scotland objection to the Proposed Scheme letter dated 21 January 2025
RSPB 10	NatureScot (undated). Habitats Regulations Appraisal (HRA) on the Firth of Forth - A Guide for developers and regulators NatureScot (Accessed 15.12.2025)
RSPB 11	Davidson, N.C. & Rothwell, P.I (1993) Human disturbance to waterfowl on estuaries: conservation and coastal management implications of current knowledge. <i>Wader Study Group Bulletin</i> , 68 pp.97–106
RSPB 12	East Lothian Council (2024) Musselburgh Flood Protection Scheme EIA Report Chapter 7. Available at: https://www.musselburghfloodprotection.com/wp-content/uploads/2024/03/MFPS-EIA-Report-Chapter-7-Biodiversity-FOR-ISSUE.pdf (Accessed 15.12.25)
RSPB 13	NatureScot (2022) European Site Casework Guidance: How to consider plans and projects affecting Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) https://www.nature.scot/doc/european-site-casework-guidance-how-consider-plans-and-projects-affecting-special-areas-conservation NatureScot (Accessed 15.12.2025)
RSPB 14	The Scottish Government (2024) Nature Conservation Act 2004 https://www.legislation.gov.uk/asp/2004/6/pdfs/asp_20040006_en.pdf Scottish Government (Accessed 15.12.25)

RSPB 15	UK Government (1994) Conservation (Natural Habitats &c.) Regulations 1994 (as amended) https://www.legislation.gov.uk/uksi/1994/2716/contents (Accessed 15.12.25)
RSPB 16	EC (1979) (amended 2009) The Birds Directive - Environment - European Commission (Accessed 15.12.25)
RSPB 17	Inner Forth Landscape Initiative Kinneil Lagoons – Boost the Roost Inner Forth Futures . Inner Forth Landscape Initiative (Accessed 15.12.25)
RSPB 18	RSPB (2014) Kinneil Lagoons: Management Plan 2014-2018, Maintenance Plan 2018-2028. Unpublished report to RSPB Scotland and Falkirk Council
RSPB 19	Inner Forth Landscape (2019) Bothkennar Pools. Available at: https://www.innerforthlandscape.co.uk/projects/conserving-restoring/bothkennar-pools (Accessed 15.12.25)
RSPB 20	Symonds, F. and Langslow, D. (1984) Movements of Wintering Shorebirds within the Firth of Forth: Species Differences in Usage of an Intertidal Complex. <i>Biological Conservation</i> , 28 (3) pp.187-215 https://doi.org/10.1016/0006-3207(84)90044-2
RSPB 21	Rogers, D. I. (2003) High-tide Roost Choice by Coastal Waders. <i>Wader Study Group Bulletin</i> : Vol. 100: No. 1, Article 17. Available at: https://digitalcommons.usf.edu/wsg_bulletin/vol100/iss1/17 (Accessed: 15.12.25).
RSPB 22	M.M. Rehfisch, R.H.W. Langston, N.A. Clark and C. Forrest (1993) A Guide to the Provision of Refuges for Roosting Waders: A report by the British Trust for Ornithology under contract to English Nature. Available at: https://www.bto.org/sites/default/files/shared_documents/publications/research-reports/1993/rr120.pdf (Accessed: 15.12.25)
RSPB 23	Fraser L. Symonds, F., Derek R. Langslow, D.R. and Michael W. Pienkowski M. (1984) Movements of Wintering Shorebirds within the Firth of Forth: Species Differences in Usage of an Intertidal Complex. <i>Biological Conservation</i> 28(3) pp 187-215 https://doi.org/10.1016/0006-3207(84)90044-2
RSPB 24	Constantinos, M., Payo Payo, M., Brown, J. and Amoudry L. (2025) Enhancement of coastal flood mitigation by implementing hybrid flood defences integrating hard engineering and nature-based solutions. <i>Science of the Total Environment</i> https://doi.org/10.1016/j.scitotenv.2025.181063 . Available at: https://nora.nerc.ac.uk/id/eprint/540697/1/1-s2.0-S0048969725027032-main.pdf (Accessed 15.12.25)
RSPB 25	Richard Kehoe, NatureScot Operations Officer (24/11/25) email to Falkirk Council setting out NatureScot's position on the Proposed Scheme.
RSPB 26	NatureScot (19.09.24) comments log on GFPS.

Appendix 2: SPA/SSSI/Ramsar Species List

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

* indicates assemblage qualifier only

RSPB Skinflats Reserve and Grangemouth FPS

Legend:

- RSPB Skinflats nature reserve
- Grangemouth FPS boundary (approx.)

Acknowledgements & notes:

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Map scale = 1:15,052 Date printed: 11/12/2025

0 0.125 0.25 0.5 km

RSPB

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Appendix 4: Contact with Falkirk Council and Consultants Regarding the Grangemouth Flood Protection Scheme

Date	Engagement
October 2018	Scoping report issued to RSPB
September 2019	Response to scoping opinion comments issued to RSPB
January/ February 2020	Email communications with RSPB
March 2020	Tele conference RSPB/ GFPS team to discuss various aspects of the Scheme
11/11/2021	RSPB sent request to Falkirk Council for information on the Habitats Regulations Appraisal
13/12/2021	RSPB sent chasing email to Falkirk Council after no response to email of 11/11/21
13/12/2021	RSPB received response from Jacobs saying that we will be kept involved.
14/3/2022	RSPB sent request to Falkirk Council for an update on the proposed Scheme.
23/3/ 2022	RSPB received an email from Jacobs saying that RSPB would receive details of the proposed conservation measures soon.
29/8/2022	RSPB sent a request to Falkirk Council for an update and a meeting
22/9/2022	RSPB received a response from Jacobs with the offer of a meeting
6/12/2022	RSPB met with NatureScot, Jacobs and representatives from Falkirk Council.
19/12/2022	RSPB sent follow-up information to Jacobs on alternative compensation proposals but received no response.
22/8/2023	RSPB sent a request to Falkirk Council for an update and offered a meeting with RSPB and other conservation organisations.
8/9/2023	RSPB received a response from Falkirk Council saying that a meeting could be arranged in December 2023 but no offer of a meeting was forthcoming.
11/9/2023	RSPB sent an email to Falkirk Council noting the response and raised concerns at the lack of engagement.
4/3/2024	RSPB attended stakeholder event.

Date	Engagement
24/4/2024	RSPB sent an offer to Falkirk Council for a meeting to discuss the specifics of the compensation proposals. This was not accepted.
21/10/2025	RSPB sent an email to Falkirk Council asking for an update on the hearing and asked if there was an opportunity to discuss our outstanding concerns.
20/11/2025	RSPB sent an email to Falkirk Council with available dates for a meeting.
24/11/2025	Programme Officer confirmed timescales and when hearing statement was required.
05/12/2025	RSPB sent a follow-up email to Falkirk Council as no date for a meeting had been set. Falkirk Council responded and asked for dates in January 2026, which RSPB provided.
08/12/2025	RSPB received notification of hearing date of 28 th January 2026
10/12/2025	RSPB received requested copy of NatureScot's response to HRA dated 24/11/25
16/12/2025	Still no date for proposed meeting.