

5. (h). (i). Potential impacts the works may have (including details of areas of concern e.g designated conservation and shellfish harvesting areas) and proposed mitigation in response to potential impacts (continue on separate sheet if necessary):

In absence of appropriate mitigation, the works may carry a potential to cause impact to the marine environment. As such, a non-statutory environmental assessment of the proposed works has been undertaken, with a Site Environmental Management Plan (SEMP) having been produced. The objective of the SEMP is to mitigate the potential pollution of land, air or water; provide compliance with current environmental legislation; and, to provide a benchmark for best practice. The SEMP will make specific reference to, but not be limited to, the following measures:

- The requirement for all on-site activities to operate in line with current best practice, such as SEPA's Pollution Prevention Guidelines / Guidance for Pollution Prevention (PPGs / GPPs).
- The appropriate scheduling of works to ensure that all work activities undertaken are to avoid periods of high tide.
- The requirement that all machinery, plant, materials and wastes are to be appropriately stored at all times, i.e. within the site compound set up on the A83 carriageway, as opposed to below MHWS.
- The appropriate programming of all concrete works, ensuring that concrete is set prior to periods of high tide. Furthermore, accelerants will be passed through the concrete to ensure that it is adequately set. Additional mitigation, in the form of a physical barrier between areas of new concrete and the natural environment, will also be implemented.

10. Scotland's National Marine Plan – General Policies

GEN 2 *Economic benefit: Sustainable development and use which provides economic benefit to Scottish communities is encouraged when consistent with the objectives and policies of this Plan &*

GEN 3 *Social benefit: Sustainable development and use which provides social benefits is encouraged when consistent with the objectives and policies of this Plan.*

- The proposed package of works is required to maintain the structural integrity of the seawall within the scheme extents. The seawall at this location provides protection to the A83 trunk road, as well as the southern half of Inveraray. If the identified areas of failure within the seawall were to not be proactively repaired, then there would be potential for the seawall to structurally fail in the future, compromising the safety and integrity of the A83 carriageway. In the event of the failure of the A83, a much more significant package of reactive works would be required, which would incur a higher cost. Furthermore, local communities may experience socio-economic impacts as a result of potential closures to the trunk road.

GEN 5 *Climate change: Marine planners and decision makers must act in the way best calculated to mitigate, and adapt to, climate change.*

- This solution has been designed with due cognisance of the potential impacts that may arise as a result of climate change. As such, the proposed package of works will reinstate existing coastal protection measures, as well as providing an additional element of protection in the form of rock armour revetment (in areas where this has been assessed as being required).

GEN 6 *Historic environment: Development and use of the marine environment should protect and, where appropriate, enhance heritage assets in a manner proportionate to their significance.*

- The northern half of the works location, where works are restricted to the reinstatement of the existing seawall, is located within the Inveraray Conservation Area. Consultation with Argyll and Bute Council's Historic Environment Team have confirmed that they are content for the works to proceed as planned, due to the works reinstating the existing seawall to its original state. No other features of cultural heritage will be impacted by the proposed package of works.

GEN 7 *Landscape/seascape: Marine planners and decision makers should ensure that development and use of the marine environment take seascape, landscape and visual impacts into account.*

- The proposed works to reinstate the seawall to its original state will operate on a like-for-like basis, and as such, will not result in any changes to the landscape / seascape. The addition of the rock armour scour protection system in the schemes southern half will result in a permanent change to the local landscape / seascape. The scour protection has been assessed as a necessary addition to protect the reinstated seawall and will prevent future scour to the structure. The addition of the scour protection will not result in the length of coastline currently protected increasing; however, the footprint of the coastal protection measures will increase by 527m² (over the 1025m long scheme). When taking account of the scale and extent of existing coastal protection measures, the addition of the rock armour scour protection solution (at the toe of the existing seawall), is anticipated to result in a negligible change to the local landscape / seascape.

GEN 8 *Coastal process and flooding: Developments and activities in the marine environment should be resilient to coastal change and flooding, and not have unacceptable adverse impact on coastal processes or contribute to coastal flooding.*

- The majority of the 1025m long scheme is located above the MHWS, and as such, the works are unlikely to result in any impacts to local coastal processes or coastal flooding. Where work is being undertaken below the MHWS, it is explicitly for the purposes of reinstating the existing seawall and reducing future scour to the seawall through the installation of the rock armour. By ensuring that the seawall is adequately protected from excess scour, it will enable it to continue to provide protection to the A83 trunk road and the town of Inveraray.

GEN 9 *Natural heritage: Development and use of the marine environment must: (a) Comply with legal requirements for protected areas and protected species. (b) Not result in significant impact on the national status of Priority Marine Features. (c) Protect and, where appropriate, enhance the health of the marine area.*

GEN 10 *Invasive non-native species: Opportunities to reduce the introduction of invasive non-native species to a minimum or proactively improve the practice of existing activity should be taken when decisions are being made.*

- Ecological site surveys are scheduled to be undertaken of the scheme location in October 2019, primarily focussing on the presence of protected species and Invasive Non-Native Species (INNS). Upon completion of these surveys, any species licencing identified as being required will be applied for and be in place prior to construction works commencing. If INNS are identified within the footprint of the proposed works, then strict site hygiene measures will be enforced to negate, as far as is reasonably practicable, the potential for the works to result in their spread.
- The works will operate entirely above the MLWS of Loch Fyne, which is designated as a Marine Protected Area (under the Loch Fyne and Loch Goil MPA – SNH Site Code 10424). The MLWS acts as the boundary for the MPA, and as such no works will be undertaken within the boundaries of the designated site (including there being no requirement for access throughout the construction period). The designation is for the Priority Marine Features of burrowed mud, flame shell beds and horse mussel beds, as well as for ocean quahog aggregations and sublittoral mud and specific mixed sediment communities. Consultation with SNH noted that areas of burrowed mud habitat are located adjacent to Inveraray within Loch Fyne, however that this habitat is limited to waters in excess of 10m deep. As such, as no works will be undertaken within waters of any depth, no direct impacts to the feature are anticipated. SNH advised that providing works operate in line with best practice measures for sediment control and pollution prevention, that they are content for them to proceed.

GEN 12 *Water quality and resource: Developments and activities should not result in a deterioration of the quality of waters to which the Water Framework Directive, Marine Strategy Framework Directive or other related Directives apply.*

- The Loch Fyne Upper Basin has been assessed by SEPA as having an overall WFD status of Good in 2017. All works activities will be programmed to exclusively operate at periods of low tide, with no works being required to operate within, or in immediate proximity to, the waters of Loch Fyne. Best practice construction methods will be followed at all times on site, including, but not limited to, SEPA's Pollution Prevention Guidelines / Guidance for Pollution Prevention (PPGs / GPPs). No machinery, plant, materials or wastes will be stored below the MHWS when the site is not operational (i.e. at night or at high tide). All concrete works will be appropriately designed to ensure that they are not impacted by high tide, which in turn will also ensure that Loch Fyne does not come into direct contact with areas of unset concrete.

GEN 13 *Noise: Development and use in the marine environment should avoid significant adverse effects of man-made noise and vibration, especially on species sensitive to such effects.*

- The proposed works are not anticipated to be particularly noise heavy, with the operation of plant / machinery (i.e. excavator / dumper) and the placing of rock armour, likely to be the most significant noise producing aspects of the project. Best practice measures will be implanted onsite to ensure that levels of noise produced by the proposed works are minimised as much as is reasonably practicable.

GEN 18 *Engagement: Early and effective engagement should be undertaken with the general public and all interested stakeholders to facilitate planning and consenting processes.*

- Consultation has been undertaken with all relevant statutory bodies prior to the submission of the Marine Licence Application. A communications strategy will be produced to ensure that all interested / relevant stakeholders are sufficiently consulted with prior to the works commencement. This will include, but not be limited to: local residents, the Local Authority, local Community Council(s), local businesses, etc.

12. Consultation

- SNH: Consultation regarding works in proximity to the Loch Fyne and Loch Goil MPA
- Argyll and Bute Council's Historic Environment Team: Consultation regarding the works partially being located within the Inveraray Conservation Area

From: Peter Wrigley
Sent: 11 October 2019 16:11
To: catriona.laird@nature.scot
Subject: Proposed Package of Seawall Repair Works adjacent to Upper Loch Fyne and Loch Gail MPA

Hi Catriona,

I called the Lochgilphead SNH Office this afternoon to discuss a proposed package of works and was given your contact details.

BEAR Scotland are proposing to undertake a package of seawall repair works along an approximate 1km length of the A83 within Inveraray ([map outlining the scheme extents](#)). Over time, the condition of the seawall within the scheme extents has deteriorated, with recent surveys having identified a number of areas of failure. The proposed works will entail the following activities:

- All voids in the seawall identified within the scheme extents are to be infilled with expanding concrete, reinstating the seawall to its original form; and
- A rock armour scour protection system (varying in height between 2 and 3m) will be installed along a 527m stretch of the scheme (the southern half of the scheme extents), providing an additional degree of protection to the seawall at this location.

The works will operate both above and below the Mean High Water Springs (MHWS) of Loch Fyne, and as such we will be applying to Marine Scotland for a Marine Licence.

Loch Fyne is designated as a Marine Protected Area (under the [Loch Fyne and Loch Gail MPA – SNH Site Code 10424](#)) for burrowed mud, flame shell beds, horse mussel beds, ocean quahog aggregations, and sublittoral mud and specific mixed sediment communities. Works to reinstate the seawall will not result in the existing footprint of the structure extending beyond its current extent. In the scheme's southern half, the installation of the rock armour scour protection system will extend no more than 1m below the MHWS and will always remain above the Mean Low Water Springs (MLWS). The MLWS acts as the boundary for the MPA, and as such no works will be undertaken within the boundaries of the designated site (including there being no requirement for access throughout the construction period).

Works are currently programmed to commence in February 2020 for a period of six weeks. On-site construction will be undertaken between the hours of 7am and 7pm, however it is expected that available daylight hours and tide times will influence working times on a daily basis. One lane of the A83 will be closed throughout the works period, allowing for a suitable site compound to be set up. As such, no machinery, plant, materials or wastes will be stored below the MHWS when the site is not operational (i.e. at night or at high tide).

Whilst I appreciate that I have only provided a very brief overview of the proposed works; do you envisage that the outlined construction activities could hold potential to result in any impacts to the Loch Fyne and Loch Gail MPA, or the features for which it has been designated?

We have ecological surveys scheduled for the end of the month, primarily to survey for the presence of otter. Pending the results of the survey, the relevant licences will be applied for prior to the works commencing.

Any help you could provide would be greatly appreciated.

Kind regards,
Peter

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From: Catriona Laird <Catriona.Laird@nature.scot>
Sent: 17 October 2019 16:41
To: Peter Wrigley <PWrigley@bearsotland.co.uk>
Subject: Proposed Package of Seawall Repair Works adjacent to Upper Loch Fyne and Loch Gail MPA - SNH Response - 17 October 2019

Hi Peter,

Once again, apologies for the delay in responding to you - I've now had the chance to look over your email below in more detail. You are right in that the project will border the Upper Loch Fyne and Loch Gail MPA and if you look at the 'MPA Data Confidence Assessment' document for the MPA on our [Sitelink website](#), it shows a map of the recorded protected features within the MPA boundary. You'll see that we have records for the burrowed mud habitat in the water environment adjacent to the A83 at Inveraray. You can find more information about this habitat on our [website](#) however burrowed mud habitats are subtidal (occurring generally in water depths greater than 10m) and therefore the proposed works will not directly impact upon this habitat. However, it is worth noting that this habitat can be sensitive to pollution and excessive sedimentation which could occur as a result of the works and therefore you should consider measures to prevent sediment run off or any fuel pollution into Loch Fyne during the proposed works.

Hopefully you find this information useful but feel free to get in touch if you have any further queries.

Kind regards,

Catriona

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From: Peter Wrigley
Sent: 18 October 2019 10:39
To: Catriona Laird <Catriona.Laird@nature.scot>
Subject: RE: Proposed Package of Seawall Repair Works adjacent to Upper Loch Fyne and Loch Gail MPA - SNH Response - 17 October 2019

Hi Catriona,

I very much appreciate your response.

Our environmental assessment of the proposed works had noted the burrowed mud habitat adjacent to Inveraray. It was the conclusion of our assessment that, given the nature of the habitat, that it was unlikely we would cause a direct impact, however we were keen to confirm this with yourself. With regards to indirect impacts, a Site Environmental Management Plan (SEMP) will be enacted throughout the works period to ensure that all construction activities are undertaken in compliance with current best practice, with relevant safeguards in place to mitigate any potential pollution incidents. Works will also be effectively programmed to ensure that no works are undertaken during periods of high tide, therefore removing any potential for the waters of Loch Fyne to come into contact with any active construction. Furthermore, the works area outwith the existing A83 trunk road (on the beach) will be appropriately cleared of machinery, plant, materials or wastes at the end of each shift, with a view of limiting any potential pollution incidents.

Once again, thank you so much for your help with this matter.

Kind regards,
Peter

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From: Peter Wrigley
Sent: 14 October 2019 10:48
To: planning.maki@argyll-bute.gov.uk
Subject: Proposed Package of Seawall Repair Works partially located within Inveraray Conservation Area

To whom it may concern,

BEAR Scotland are proposing to undertake a package of seawall repair works along an approximate 1km length of the A83 within Inveraray ([map outlining the scheme extents](#)). Approximately 400m of these works are located within the boundaries of the Inveraray Conservation Area.

Over time, the condition of the seawall within the scheme extents has deteriorated, with recent surveys having identified a number of areas of failure, consisting of voids within the structure. The proposed works within the Inveraray Conservation Area will entail the infilling of all voids with expanding concrete and the resetting of masonry units, reinstating the seawall to its original form. Where possible, existing masonry units will be retrieved from the voids for reuse, however where this is not possible (or where there are insufficient units present), new units will be used. New units will be sourced to match the existing aesthetic of the seawall.

Works are currently programmed to commence in February 2020 for a period of six weeks, with on-site construction undertaken between the hours of 7am and 7pm (however it is expected that available daylight hours and tide times will influence working times on a daily basis). One lane of the A83 will be closed throughout the works period, with temporary traffic lights in operation.

Whilst I appreciate that I have only provided a very brief overview of the proposed works; do you envisage that the outlined construction activities could hold potential to impact the Inveraray Conservation Area?

Any help or information you could provide would be greatly appreciated.

Kind regards,
Peter

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