



Transport Scotland
North West Unit



Statement to Inform Appropriate Assessment

A828 60 Creagan New Painting

Statement to Inform Appropriate Assessment

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Transport Scotland			

Distribution		
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1. Habitats Regulations Appraisal Proforma

APPRAISAL IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994 AS AMENDED¹ (HABITATS REGULATIONS APPRAISAL)

NATURA SITE DETAILS

Name of Natura site(s) potentially affected:

Loch Creran SAC, Glen Creran Woods SAC, Eileanan agus Sgeiran Lios mor SAC, Glen Etive and Glen Fyne SPA, and Loch Creran MPA(NC)

Name of component SSSI if relevant:

Glen Creran Woods SSSI

Natura qualifying interest(s) & whether priority/non-priority:

Loch Creran SAC

- Reefs (including marine mammals) – Unfavourable Recovering

The site is of European importance for its biogenic reefs of the calcareous tube-worm *Serpula vermicularis*. Development of these reefs is very rare. Loch Creran is the only known site for these reefs in the UK and contains the highest abundance of these reefs throughout Europe. Loch Creran also contains biogenic reefs of the horse mussel *Modiolus modiolus*.

Glen Creran Woods SAC

- Mixed woodland on base-rich soils associated with rocky slopes (*Tilio-Acerion* forests of slopes, screes and ravines) – Priority Feature – Favourable Maintained
- Western acidic oak woodland (old sessile oak woods with *Ilex* and *Blechnum* in the British Isles) – Favourable Declining
- Otter (*Lutra lutra*) – Favourable Maintained

Eileanan agus Sgeiran Lios mor SAC

- Harbour seal (*Phoca vitulina*) – Favourable Maintained

Glen Etive and Glen Fyne SPA

- Golden eagle (*Aquila chrysaetos*), breeding – Favourable Maintained

Loch Creran MPA(NC)

- Flame shell beds (*Limaria hians*)*
- Quaternary of Scotland*

*Status is considered to be favourable based on the MPA assessment for Loch Creran, which stated that ‘the protected features are considered to be unmodified by human activity and in good condition, with a medium cumulative risk of future damage occurring’².

Flame shell beds are present at the western end of the Creagan Narrows. However, the largest concentration of flame shell beds in Loch Creran is located south of the Eriska Narrows at North Shian, near the mouth of the sea loch.

Glen Creran Woods SSSI

- Bryophyte assemblage – Favourable Maintained
- Chequered skipper (*Carterocephalus palaemon*) – Unfavourable Recovering
- Lichen assemblage – Unfavourable No Change
- Pearl-bordered fritillary (*Boloria euphrosyne*) – Unfavourable Recovering

¹ Or, where relevant, under regulation 61 of The Conservation of Habitats and Species Regulations 2010 as amended, or regulation 25 of The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 as amended.

² SNH (2014). *Scottish MPA Project Assessment against the MPA Selection Guidelines: Loch Creran Nature Conservation MPA*. Available from <<https://sitelink.nature.scot/site/10415>>

- Upland oak woodland – Unfavourable Recovering

Conservation objectives for qualifying interests:

Loch Creran SAC

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

To ensure for the qualifying habitat 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

Glen Creran Woods SAC

To avoid deterioration of the qualifying habitats (mixed woodland on base-rich soils associated with rocky slopes; western acidic oak woodland), thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for the qualifying features; and

To ensure for the qualifying habitat 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

To avoid deterioration of the habitats of the qualifying species (otter [*Lutra lutra*]) 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 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

Eileanan agus Sgeiran Lios mor SAC

To avoid deterioration of the habitats of the qualifying species (common/harbour seal [*Phoca vitulina*]) 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 the qualifying features; 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

Glen Etive and Glen Fyne SPA

To avoid deterioration of the habitats of the qualifying species (golden eagle [*Aquila chrysaetos*]) 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

Loch Creran MPA(NC)

The protected features (flame shell beds; Quaternary of Scotland), so far as already in favourable condition, remain in such condition; and

The protected features, so far as not already in favourable condition, be brought into such condition, and remain in such condition.

“Favourable condition”, with respect to a marine habitat, means that its extent is stable or increasing; and, its structure and functions, its quality, and the composition of its characteristic biological communities are such as to ensure that it is in a condition which is healthy and not deteriorating³.

STEP 1: WHAT IS THE PLAN OR PROJECT?

Proposal title:

A828 60 Creagan New Painting

Name of consultee:

Scottish Natural Heritage

Name of competent authority:

Transport Scotland

Details of proposal (inc. location, timing, methods):

The A828 60 Creagan Bridge (centre point NM 97820 44344) spans Loch Creran on the west coast of Scotland, approximately halfway between Ballachulish and Connel. The bridge is within Loch Creran SAC and MPA(NC).

Inspections have identified deterioration of the protective paint coating on the steel elements of the bridge, which requires repair. The lining of the expansion joint at the northern end of the bridge has also come loose and will be refurbished during works. The proposed works will entail removal of the existing paint coating by grit-blasting, repainting of the main longitudinal and transverse girders on the underside of the bridge deck, and refurbishment of the northern expansion joint. Access will be provided by a temporary underslung scaffold spanning over the water, which will be fully encapsulated during works. Access to the scaffold will either be from the A828 above or from below via an access tower/staircase below the southernmost span. No works will be carried out in the water. The scheme is currently proposed to commence in July 2020 with the aim to be completed by December 2020 (approximate six-month duration). Expected site working hours are 07:00 to 19:00. The site compound is proposed to be located in a layby on the old A828 that passes under the bridge on the southern shore of Loch Creran. The layby is located approximately 25m southwest of the bridge and will be closed to road users during this time.

Specific methods will be confirmed once a contractor is appointed to carry out the works. However, the following general steps of the works are outlined below, as per similar grit-blasting and painting schemes on other trunk road bridges.

1. Set up site compound.
2. Erect scaffolding tower and underslung platform beneath bridge (with traffic management as required).
3. Encapsulate scaffold platform and working areas.
4. Grit-blast all exposed steelwork on the underside of the bridge.

³ Scottish Ministers. 2014. *Loch Creran Nature Conservation Marine Protected Area Order 2014*. Available from <<https://www2.gov.scot/Resource/0045/00456491.pdf>>

5. Paint all exposed steelwork on the underside of the bridge.
6. Remove encapsulation.
7. Dismantle all scaffolding.
8. Remove site compound and all materials from site.

A range of good practice and management measures will be adopted by the successful contractor. These are detailed below.

- The site supervisor will give toolbox talks prior to works commencing. These talks will highlight any sensitive features, including the designated sites.
- The contractor will adhere to relevant Pollution Prevention Guidance (PPGs) and Guidance for Pollution Prevention (GPPs), including GPP 5 (Works and maintenance in or near water).
- No discharges into any surface water will be permitted.
- Regular inspections of all plant, vehicles, machinery, and equipment for signs of damage or leaks will be carried out.
- All hazardous material will be stored in accordance with Control of Substance Hazardous to Health (COSHH) regulations in a designated fully bunded storage area at least 10m from any watercourses, drains, and/or waterbodies.
- Fuel will be stored in double-skinned bowzers or tanks at least 10m from any surface waters.
- Drip trays and funnels will be used as required during refuelling activities.
- Biodegradable hydraulic fluids and oils will be used in plant and machinery where applicable and practicable.
- A spillage control procedure will be adhered to on site, with all staff trained and spill kits available and quickly accessible.
- A contingency plan will be produced for dealing with spills or environmental incidents (to be produced by the contractor).
- Any artificial lighting required (e.g. for winter working hours) will be directed away from the water and any other sensitive habitats as far as is safe and reasonably practicable.
- All plant, machinery, and vehicles will be switched off when not in use.
- All plant, machinery, and equipment will be operated in such a way that reduces noise emissions and will be maintained regularly to the appropriate standards.
- Where possible, all plant, machinery, and equipment will be fitted with effective silencers to reduce noise emissions.
- Any waste generated will be removed from site by licensed waste carriers to appropriate facilities and recycled or disposed.

STEP 2: IS THE PLAN OR PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO SITE MANAGEMENT FOR NATURE CONSERVATION?

The following points should be considered:

- i) Has the effect on all qualifying interests been considered?*
 - ii) Is the proposal part of a fully assessed and agreed management plan?*
 - iii) Is there a clear rationale to justify the connection with the conservation objectives?*
 - iv) If there is a clear connection with the conservation objectives will any benefits arising from the proposal outweigh any negative effects?*
 - v) Have any alternative methods of implementing the proposal been explored to demonstrate that this is the least damaging option?*
 - vi) Give a YES/NO conclusion in terms of whether the plan or project is considered directly connected with or necessary to site management for nature conservation.*
- If **YES** for all elements of a plan or project, for all the Natura qualifying interests (preferably as part of a fully assessed and agreed management plan), then consent can be issued. The rationale should be detailed below and no further appraisal is required (no need to proceed to step 3 or 4).
- If **No** for all Natura qualifying interests then proceed to step 3.
- **If a plan has multiple elements (e.g. a range of policies or management objectives)**, elements of the plan considered directly connected with or necessary to site management for nature conservation should be discussed below and a rationale given for this conclusion. No further appraisal is then required for those elements. All other elements of the plan must proceed to step 3.

No, the proposed maintenance works are not necessary to site management for nature conservation.

STEP 3: IS THE PLAN OR PROJECT (EITHER ALONE OR IN COMBINATION WITH OTHER PLANS OR PROJECTS) LIKELY TO HAVE A SIGNIFICANT EFFECT ON THE SITE?

Each qualifying interest should be considered in relation to their conservation objectives. The following points should be considered:

- i) Briefly indicate which qualifying interest could be affected by the proposal and how; if none, provide a brief justification for this decision, and then proceed to v), otherwise continue;
- ii) refer to other plans/projects with similar effects/other relevant evidence;
- iii) consider the nature, scale, location, longevity, and reversibility of effects;
- iv) consider whether the proposal contributes to cumulative or incremental impacts in combination with other plans or projects completed, underway or proposed;
- v) Where the impacts of a proposal are the same for different qualifying interests these can be considered together however a clear conclusion should be given for each interest
- vi) give Yes/No conclusion for each interest.

- **If yes, or in cases of doubt, continue to step 4.**

- **If potential significant effects can easily be avoided, record modifications required below.**

- **If no for all features, a consent or non-objection response can be given and recorded below (although if there are other features of national interest only, the effect on these should be considered separately). There is no need to then proceed to step 4.**

Loch Creran SAC

The qualifying feature 'reefs' are biogenic in origin and support internationally important populations of the calcareous tube-worm *Serpula vermicularis* and the horse mussel *Modiolus modiolus*, which may experience LSE from the proposed works through pollution or loss of containment. Following consultation with SNH (Claire Masson, 6th January 2020), it is concluded that **works could lead to Likely Significant Effect (LSE) on the qualifying feature (reefs) of the SAC**. In recognition that there could be LSE from the proposed works on the qualifying feature reefs of *S. vermicularis* and *M. modiolus* within the SAC, Step 4 is considered.

Glen Creran Woods SAC

The footprint of the works will not extend into Glen Creran Woods SAC and there will therefore be no direct habitat loss within the SAC. The qualifying woodland features are located over 280m from the works and are unlikely to be affected by pollution due to this distance. Passage along the coastlines beneath the bridge will be maintained for otter. A survey carried out on 13th-14th January 2020 recorded several otter spraints within 200m of Creagan Bridge, suggesting that otter are present in the area; however, no resting sites were identified within 200m of the bridge, despite the availability of suitable structure. Otter are highly mobile and the area of works comprises only a small portion of the useable habitat (e.g. foraging, resting sites) available to otter. In addition, it is likely that otter using the area around Creagan Bridge would be accustomed to existing levels of disturbance from traffic on the trunk road. Although grit-blasting would increase noise levels in the area, these works will be undertaken during daylight hours. Some deliveries of material will take place at night, but these will be intermittent and of short duration. Daylight working hours for the main works, including the most disruptive activities (e.g. grit-blasting), should lessen any impact to otter using the area, as otter tend to be active at night or around dusk and dawn. Any otter in the area that were active during daytime hours would also be able to move away from the bridge into less disturbed areas. A pre-construction survey will be carried out prior to works to identify any resting places in proximity to the bridge, particularly in areas of suitable habitat. No resting places will be destroyed by works, and any potential holts will be monitored to determine use and status. Disturbance to any otter couches or non-breeding holts identified would be allowed under BEAR Scotland's organisational otter licence (155466). SNH is in agreement with this assessment (Claire Masson, 6th January 2020 and 22nd January 2020). It is concluded that **there will be no LSE from the proposed works on the qualifying features** mixed woodland on base-rich soils associated with rocky slopes (*Tilio-Acerion* forests of slopes, screes and ravines), Western acidic oak woodland (old sessile oak woods with *Ilex* and *Blechnum* in the British Isles), or otter (*Lutra lutra*) **of the SAC**. Therefore, Step 4 is not considered for these qualifying features.

Eileanan agus Sgeiran Lios mor SAC

There is connectivity for harbour seals between the SAC and the scheme; however, the bridge is located near the eastern (inland) end of Loch Creran, whereas harbour seals are more likely to use the sea and mouth of Loch Creran at the opposite

end. In addition, the nearest haul out site for harbour seal is located approximately 25km distant from the scheme. It is unlikely that harbour seals would be impacted by disturbance due to distance from the works. Additionally, although harbour seals may use the area, they are highly mobile and there is abundant alternative habitat in the surrounding area. It is concluded that **there will be no LSE from the proposed works on the qualifying feature harbour seal of the SAC.**

Works are currently underway at Connel Bridge (south of Creagan Bridge) and works are planned at Ballachulish Bridge (north of Creagan Bridge). However, similar good practice measures will be in place at these bridges to avoid environmental impacts, and the schemes are both distant from Creagan Bridge: 12km (straight-line distance) to Connel and 16km (straight-line distance) to Ballachulish. Furthermore, the shoreline distance (utilised by harbour seals) between the schemes is much greater due to coastal geography and therefore provides additional buffers to sound and disturbance between the working areas. Therefore, it is concluded that **there will be no LSE from in-combination effects on the qualifying feature (harbour seal) of the SAC.** SNH is in agreement with this assessment (Claire Masson, 6th January 2020 and 22nd January 2020). Step 4 is not considered for the qualifying feature harbour seal.

Glen Etive and Glen Fyne SPA

Although works are currently proposed to take place during the golden eagle breeding season, eagles are unlikely to breed in the immediate vicinity of Creagan Bridge and are more likely to breed within Glen Etive and Glen Fyne SPA (3km from the bridge at the closest point) or further inland on high ground. Golden eagles may forage over areas near the bridge (e.g. farmland, moorland, woodland); however, there is ample alternative foraging habitat in the SPA and further away from the scheme. It is likely that eagles using the area around Creagan Bridge would be accustomed to existing levels of disturbance from traffic on the trunk road. It is concluded that **there will be no LSE from the proposed works on the qualifying feature golden eagle of the SAC.** SNH is in agreement with this assessment (Claire Masson, 6th January 2020). Step 4 is not considered for this qualifying feature.

Loch Creran MPA(NC)

There will be no in-stream working; however, LSE on this feature is possible through pollution or loss of containment of materials associated with the proposed works. Following consultation with SNH (Claire Masson, 6th January 2020), it is concluded that **works could lead to LSE on flame shell beds, which is one qualifying feature of the MPA(NC).** In recognition that there could be LSE from the proposed works on flame shell beds within the MPA(NC), Step 4 is considered.

No excavation or drilling works are required throughout the scheme, and the site compound will be located outwith the boundary of the MPA(NC). Therefore, the geology and geomorphology of the MPA(NC) will not be affected by works. It is concluded that **there will be no LSE on the other qualifying feature (Quaternary of Scotland) of the MPA(NC),** and Step 4 is not considered for this qualifying feature.

Summary of Potential In-Combination Effects

Aside from the other schemes at Connel Bridge and Ballachulish Bridge mentioned above, there are no known projects currently planned or recently completed that have the potential to contribute to in-combination effects on the qualifying features of the above designated sites; nor were any persisting impacts from past projects identified or advised at consultation (Claire Masson, 6th January 2020).

Mitigation or modifications required to avoid a likely significant effect & reasons for these:

Mitigation cannot be considered when determining LSE, according to recent court rulings⁴.

As discussed in Step 1, it has been concluded that there is no LSE on the following Natura sites and qualifying features, which are not considered further in Step 4:

- **Glen Creran Woods SAC**
 - Mixed woodland on base-rich soils associated with rocky slopes (*Tilio-Acerion* forests of slopes, screes and ravines) – Priority Feature
 - Western acidic oak woodland (old sessile oak woods with *Ilex* and *Blechnum* in the British Isles)
 - Otter (*Lutra lutra*)
- **Eileanan agus Sgeiran Lios mor SAC**

⁴ C-323/17 People over Wind and Sweetman v Coillte Teoranta (May 2018).

- Harbour seal (*Phoca vitulina*)
- **Glen Etive and Glen Fyne SPA**
 - Golden eagle (*Aquila chrysaetos*), breeding
- **Loch Creran MPA(NC)**
 - Quaternary of Scotland

It has been concluded in Step 1 that there is LSE on the following Natura sites and qualifying features, which are discussed further in Step 4:

- **Loch Creran SAC**
 - Reefs (including marine mammals)
- **Loch Creran MPA(NC)**
 - Flame shell beds (*Limaria hians*)

Therefore, mitigation measures are required to avoid adverse impacts to site integrity on Loch Creran SAC and MPA(NC), which are discussed further in Step 5.

Step 4: UNDERTAKE AN APPROPRIATE ASSESSMENT OF THE IMPLICATIONS FOR THE SITE IN VIEW OF ITS CONSERVATION OBJECTIVES

(It is the responsibility of the competent authority to carry out the appropriate assessment. The competent authority must consult SNH for the purposes of carrying out the appropriate assessment. SNH can provide advice on what issues should be considered in the appropriate assessment, what information is required to carry out the assessment, in some circumstances carry out an appraisal to inform an appropriate assessment and/or provide comments on an assessment carried out. Where we are providing advice to a competent authority our appraisal of the proposal should be recorded here.)

The following points should be considered:

- i) Describe for each qualifying interest the potential impacts of the proposal detailing which aspects or effects of the proposal could impact upon them and their conservation objectives.*
- ii) Evaluate the potential impacts, e.g. whether short/long term, reversible or irreversible, and in relation to the proportion/importance of the interest affected, and the overall effect on the site's conservation objectives. This should be in sufficient detail to ensure all impacts have been considered and sufficiently appraised. Record if additional survey information or specialist advice has been obtained.*
- iii) Each conservation objective should be considered and a decision reached as to whether the proposal will affect achievement of this objective i.e. whether the conservation objective will still be met if the proposal is consented to.*

Loch Creran SAC – Conservation Objectives for ‘Reefs’

- *Maintain extent of the habitat on site* – No works will take place in Loch Creran; consequently, there will be no direct impacts of the works on the extent of the reef habitat within the SAC. There is potential for indirect effects on the reef habitat via pollution through loss of containment, which could cause mortality to *S. vermicularis* or *M. modiolus* and reduce the extent of the biogenic reefs. However, it is proposed to have mitigation measures in place (detailed in Step 5) to ensure full containment of the working area to avoid pollution entering the water. With these mitigation measures in place, the extent of the reef habitat within the SAC will not be impacted by works.
Conclusion – Conservation Objective (CO) met.
- *Maintain distribution of the habitat within site* – No works will take place in Loch Creran; consequently, there will be no direct impacts of the works on the distribution of the reef habitat within the SAC. There is potential for indirect effects on the reef habitat via pollution through loss of containment, which could cause mortality to *S. vermicularis* or *M. modiolus* and alter the distribution of the biogenic reefs. However, it is proposed to have mitigation measures in place (detailed in Step 5) to ensure full containment of the working area to avoid pollution entering the water. With these mitigation measures in place, the distribution of the reef habitat within the SAC will not be impacted by works.

Conclusion – CO met.

- *Maintain structure and function of the habitat* – No works will take place in Loch Creran, so the structure of the reef habitat within the SAC will not be directly impacted by works. There is potential for indirect effects on the normal functioning of the reefs via pollution through loss of containment, which could reduce water quality or clarity and impair the filter-feeding abilities of *S. vermicularis* and/or *M. modiolus*. However, it is proposed to have mitigation measures in place (detailed in Step 5) to ensure full containment of the working area to avoid pollution entering the water. With these mitigation measures in place, structure and function of the reef habitat within the SAC will not be impacted by works.

Conclusion – CO met.

- *Maintain processes supporting the habitat* – No works will take place in Loch Creran; therefore, normal water currents, temperatures, and circulation conditions of Loch Creran will be maintained. There is potential for loss of containment to cause pollution, which could impact the processes supporting the reef habitat by reducing water quality or clarity, altering salinity or pH of the water, and impairing the filter-feeding abilities of *S. vermicularis* and/or *M. modiolus*. However, it is proposed to have mitigation measures in place (detailed in Step 5) to ensure full containment of the working area to avoid pollution entering the water. With these mitigation measures in place, the processes supporting the reef habitat within the SAC will not be impacted by works.

Conclusion – CO met.

- *Maintain distribution of typical species of the habitat* – No works will take place in Loch Creran; consequently, there will be no direct impacts of the works on the distribution of *S. vermicularis*, *M. modiolus*, or other species typical of the reef habitat within the SAC. There is potential for indirect effects on the distribution of these species via pollution through loss of containment, which could reduce water quality or clarity and impair the filter-feeding abilities of *S. vermicularis* and/or *M. modiolus*. However, it is proposed to have mitigation measures in place (detailed in Step 5) to ensure full containment of the working area to avoid pollution entering the water. With these mitigation measures in place, distribution of typical species of the reef habitat within the SAC will not be impacted by works.

Conclusion – CO met.

- *Maintain viability of typical species as components of the habitat* – No works will take place in Loch Creran; therefore, normal conditions of the loch (e.g. temperatures, currents, pH) will be maintained and typical species of the reef habitat will not become stressed due to altered environmental conditions. There is potential for loss of containment to cause pollution, which could impact the viability of *S. vermicularis* and *M. modiolus* by reducing water quality or clarity, altering salinity or pH of the water, and impairing the filter-feeding abilities of these and other species typical of the reef habitat. However, it is proposed to have mitigation measures in place (detailed in Step 5) to ensure full containment of the working area to avoid pollution entering the water. With these mitigation measures in place, the viability of typical species of the reef habitat in the SAC, including *S. vermicularis* and *M. modiolus*, will not be impacted by works.

Conclusion – CO met.

- *No significant disturbance of typical species of the habitat* - No works will take place in Loch Creran; therefore, normal conditions of the loch (e.g. temperatures, currents, pH) will be maintained and typical species of the reef habitat, including *S. vermicularis* and *M. modiolus*, will not become stressed due to altered environmental conditions. There is potential for indirect disturbance of these species via pollution through loss of containment, which could reduce water quality or clarity and impair the filter-feeding abilities of these species. However, it is proposed to have mitigation measures in place (detailed in Step 5) to ensure full containment of the working area to avoid pollution entering the water. With these mitigation measures in place, typical species of the reef habitat within the SAC will not be significantly disturbed by works.

Conclusion – CO met.

Loch Creran MPA(NC) – Conservation Objectives for ‘Flame Shell Beds’ (*Limaria hians*)

- *The protected features, so far as already in favourable condition**, remain in such condition – A survey was carried out in 2012⁵ to establish the extent and condition of two areas of flame shell beds known to be in Loch Creran, verifying previous records of this feature. The survey determined that the flame shell bed at Shian was large (18 ha) with a high density of flame shells, whereas the bed at Creagan Narrows was much smaller (0.5 ha), fragmented, and of lower quality than at Shian. These results informed the designation process of the MPA(NC), which stated in the MPA assessment for Loch Creran that the protected feature of flame shell beds is considered to be ‘unmodified by human activity and in good condition’⁶. Therefore, the conservation objective is to conserve the flame shell beds and ensure that they remain in good condition (i.e. favourable condition, with a stable extent and distribution, unimpaired structure and functions).

As no works will take place in Loch Creran, there will be no direct impacts of the works on the extent of the flame shell beds within the MPA(NC). Normal water currents, temperatures, and circulation conditions will be maintained. There is potential for loss of containment to cause pollution, which could cause impacts to a range of aspects of flame shell beds (e.g. viability, extent or distribution, structure or function, processes supporting the feature) by reducing water quality or clarity, altering salinity or pH of the water, and impairing the filter-feeding abilities of *L. hians*. However, it is proposed to have mitigation measures in place (detailed in Step 5) to ensure full containment of the working area to avoid pollution entering the water. With these mitigation measures in place, the flame shell beds within the SAC will not be impacted by works.

Conclusion – CO met.

- *The protected features, so far as not already in favourable condition**, be brought into such condition, and remain in such condition – The flame shell beds are considered to be already in good (i.e. favourable) condition.

Conclusion – CO met.

* ‘Favourable condition, with respect to a marine habitat, means that its extent is stable or increasing; and, its structure and functions, its quality, and the composition of its characteristic biological communities are such as to ensure that it is in a condition which is healthy and not deteriorating’⁷.

⁵ Moore, C.G., Harries, D.B., Cook, R.L., Hirst, N.E., Saunders, G.R., Kent, F.E.A., Trigg, C. and Lyndon A.R. (2013). The distribution and condition of selected MPA search features within Lochs Alsh, Duich, Creran and Fyne. *Scottish Natural Heritage Commissioned Report No. 566*. Available from <<https://www.nls.uk/e-monographs/2013/566.pdf>>

⁶ SNH (2014). *Scottish MPA Project Assessment against the MPA Selection Guidelines: Loch Creran Nature Conservation MPA*. Available from <<https://sitelink.nature.scot/site/10415>>

⁷ Scottish Ministers. 2014. *Loch Creran Nature Conservation Marine Protected Area Order 2014*. Available from <<https://www2.gov.scot/Resource/0045/00456491.pdf>>

Step 5: CAN IT BE ASCERTAINED THAT THE PROPOSAL WILL NOT ADVERSELY AFFECT THE INTEGRITY OF THE SITE?

In the light of the appraisal, ascertain whether the proposal will not adversely affect the integrity of the site for the qualifying interests. Conclusions should be reached beyond reasonable scientific doubt. If more than one SAC and/or SPA is involved, give separate conclusions. If mitigation or modifications are required, detail these below.

Loch Creran SAC

It is concluded that, with the below mitigation measures in place, the proposed works will not cause any adverse effects on site integrity (AESI), either alone or in combination with other projects or plans, on the structure, function, or conservation objectives of the qualifying feature reefs of Loch Creran SAC.

Loch Creran MPA(NC)

It is concluded that, with the below mitigation measures in place, the proposed works will not cause any AESI, either alone or in combination with other projects or plans, on the structure, function, or conservation objectives of the qualifying feature flame shell beds of Loch Creran MPA(NC).

Mitigation or modifications required to ensure adverse effects are avoided, & reasons for these.

<p><i>Mitigation:</i></p> <p>Full encapsulation of the underslung scaffold and working area, consisting of or equivalent to:</p> <ul style="list-style-type: none"> • Heat-sealed plastic sheeting sealed to the concrete deck at the top and to the toe boards/deck sheeting at the bottom of the scaffold; • Edges, joints, seams, and gaps of plastic sheeting sealed with heat welding, tape and/or expanding foam; • Thorough daily checks of encapsulation and sign-off of permit to blast prior to each period of grit-blasting; • Installation of extraction equipment with dust filters to create negative air pressure within the encapsulated area (i.e. air flow is into, not out of, the encapsulated area); • Vacuum extractors to pipe out waste (e.g. grit and old paint) into an enclosed skip; • Upon completion of works, cleaning of working area and folding of plastic sheeting in such a way as to contain any trace of remaining debris before removal from site. 	<p><i>Reason:</i></p> <p>Full encapsulation of the scaffold and working area is required to prevent pollution or other materials escaping and entering Loch Creran SAC or MPA(NC). Without full encapsulation, there is a risk that the qualifying features of these designated sites (reefs, flame shell beds) could be impacted by works, which would result in AESI on Loch Creran SAC and/or MPA(NC).</p>
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Appendix 1. SNH Consultation

From: Claire Masson <Claire.Masson@nature.scot>
Sent: 25 February 2020 09:03
To: Carolyn Gillen <CGillen@bearsotland.co.uk>
Subject: RE: A828 Creagan Bridge SIAA - for comment

Hi Carolyn,

Apologies for the delay in getting back to you. Having looked at the document I am happy that it is comprehensive and covers all aspects of the works and any potential impacts that may occur.

Please let me know if I can do anything further.

Best wishes,

Claire

Claire Masson | Operations Officer | Scottish Natural Heritage Scottish Natural Heritage
Inverdee House | Baxter Street | Torry | Aberdeen | AB11 9QA | t: 01224 266509
Dualchas Nàdair na h-Alba | Taigh Inbhir Dhè | Sràid Baxter | Torraidh | Obar Dheathain | AB11 9QA
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From 1 May 2020, SNH will be rebranding and changing its name to NatureScot



From: Carolyn Gillen <CGillen@bearsotland.co.uk>
Sent: 24 February 2020 13:51
To: Claire Masson <Claire.Masson@nature.scot>
Subject: RE: A828 Creagan Bridge SIAA - for comment

Hi Claire,

I was just wondering if you've had a chance to look at the SIAA for painting works at A828 Creagan Bridge? We need to submit the SIAA with our marine licence application and are hoping to get this off soon.

We have also carried out one winter hibernation inspection (WHI) on the bridge and confirmed that it is a hibernation bat roost. This may impact the proposed timeline of the programme. The second WHI is scheduled for Thursday this week. We will also be conducting bat activity surveys this

summer, which should provide further information on how bats use the bridge and when the works should be carried out to reduce impacts to bats.

Kind regards,
Carolyn

From: Carolyn Gillen
Sent: 03 February 2020 10:50
To: 'Claire Masson' <Claire.Masson@nature.scot>
Subject: A828 Creagan Bridge SIAA - for comment

Hi Claire,

I have attached a draft of the SIAA for the painting works at A828 Creagan Bridge for your review. Please can you take a look and advise of any comments?

We have been advised that the bridge has bat roost potential and will need activity surveys this summer, so the proposed start date for the painting works has been pushed back to July 2020 to accommodate these.

Feel free to call if you'd like to discuss anything.

Kind regards,
Carolyn

Carolyn Gillen BS(Hons) MS ACIEEM
Environmental Advisor
BEAR Scotland | North West Unit
Direct dial: 0330 008 0551 | Ext:2551 | e-mail: cgillen@bearsotland.co.uk
Visit us @ www.bearsotland.com

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From: Claire Masson <Claire.Masson@nature.scot>
Sent: 22 January 2020 15:15
To: Carolyn Gillen <CGillen@bearsotland.co.uk>
Subject: RE: A828 Creagan Bridge Painting - Pre-application HRA Consultation

Hi Carolyn,

Apologies – I've been out of the office a lot the past week or so.

Firstly, I mistakenly listed the calcareous tube-worm *Serpula vermicularis* and horse mussel *Modiolus modiolus* as separate qualifying features of Loch Creran SAC. In actuality, 'reefs' is the only qualifying feature, but site information notes that these are biogenic reefs composed of *S. vermicularis* and *M. modiolus*. Therefore, I have written the SIAA accordingly. **Thank you for correcting this – I had missed it as they are priority marine features but this was incorrect.**

My main question is in regard to mitigation. I understand that LSE is assumed if mitigation is required and that with mitigation measures in place (e.g. full containment), there will be no AESI on reefs and flame shell beds. However, mitigation to contain pollution would also prevent pollution from impacting other qualifying features (e.g. otter, harbour seal, terrestrial habitats), but you have agreed with my screening assessment that there is no pathway to LSE for these other features. Please can you confirm whether you consider there not to be LSE from pollution on these other features for alternative reasons, such as distance from the scheme, mobility of species, and availability of additional foraging areas? **Yes these factors are why we would not consider LSE. Although they will use the area, seals and otter are a reasonable distance from their designated sites. Additionally within the context of the wider area works are a minor portion of the usable (foraging/resting etc) habitat. Otter are also abundant in the area. We would not consider the site close enough to have any impact on the terrestrial features.**

I can give you a call tomorrow if you need clarification.

Best wishes,

Claire

Claire Masson | Operations Officer | Scottish Natural Heritage Scottish Natural Heritage
Inverdee House | Baxter Street | Torry | Aberdeen | AB11 9QA | t: 01224 266509
Dualchas Nàdair na h-Alba | Taigh Inbhir Dhè | Sràid Baxter | Torraidh | Obar Dheathain | AB11 9QA
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From 1 May 2020, SNH will be rebranding and changing its name to NatureScot



From: Carolyn Gillen <CGillen@bearsotland.co.uk>

Sent: 22 January 2020 11:02

To: Claire Masson <Claire.Masson@nature.scot>

Subject: RE: A828 Creagan Bridge Painting - Pre-application HRA Consultation

Hi Claire,

I've tried phoning your office a few times, but it's been going straight to voicemail. I was just hoping to speak to you about the below points regarding the SIAA for A828 Creagan Bridge Painting scheme.

If you are available this week to discuss it, I would really appreciate it.

Kind regards,
Carolyn

From: Carolyn Gillen
Sent: 14 January 2020 11:46
To: 'Claire Masson' <Claire.Masson@nature.scot>
Subject: RE: A828 Creagan Bridge Painting - Pre-application HRA Consultation

Hi Claire,

I just wanted to clarify a couple of points regarding the advice you provided on Creagan Bridge below.

Firstly, I mistakenly listed the calcareous tube-worm *Serpula vermicularis* and horse mussel *Modiolus modiolus* as separate qualifying features of Loch Creran SAC. In actuality, 'reefs' is the only qualifying feature, but site information notes that these are biogenic reefs composed of *S. vermicularis* and *M. modiolus*. Therefore, I have written the SIAA accordingly.

My main question is in regard to mitigation. I understand that LSE is assumed if mitigation is required and that with mitigation measures in place (e.g. full containment), there will be no AESI on reefs and flame shell beds. However, mitigation to contain pollution would also prevent pollution from impacting other qualifying features (e.g. otter, harbour seal, terrestrial habitats), but you have agreed with my screening assessment that there is no pathway to LSE for these other features. Please can you confirm whether you consider there not to be LSE from pollution on these other features for alternative reasons, such as distance from the scheme, mobility of species, and availability of additional foraging areas?

Please feel free to give me a call to discuss.

Many thanks,
Carolyn

From: Claire Masson <Claire.Masson@nature.scot>
Sent: 06 January 2020 14:51
To: Carolyn Gillen <CGillen@bearsotland.co.uk>
Subject: FW: A828 Creagan Bridge Painting - Pre-application HRA Consultation

Good afternoon,

Thank you for your email consultation allowing SNH the opportunity to comment on screening for works at Creagan Bridge. We are in agreement with most of the points made in the screening document and the email below. From a technical aspect we consider there to be LSE for the

features below; as there is mitigation proposed LSE is considered to be assumed. However there would be **no adverse effect on site integrity** with the mitigation in place. A statement to inform an Appropriate Assessment, detailing the mitigation, will allow this conclusion to be reached.

Calcareous tube-worm *Serpula vermicularis*
Horse mussel *Modiolus modiolus*
Flame shell (*Limaria hians*)beds

I hope this is helpful – please let me know if you require further clarification.

Best wishes,

Claire

Claire Masson | Operations Officer | Scottish Natural Heritage Scottish Natural Heritage
Inverdee House | Baxter Street | Torry | Aberdeen | AB11 9QA | t: 01224 266509
Dualchas Nàdair na h-Alba | Taigh Inbhir Dhè | Sràid Baxter | Torraidh | Obar Dheathain | AB11 9QA
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From: Carolyn Gillen <CGillen@bearsotland.co.uk>
Sent: 04 December 2019 10:59
To: ARGYLL_OUTERHEBRIDES <ARGYLL_OUTERHEBRIDES@nature.scot>
Subject: A828 Creagan Bridge Painting - Pre-application HRA Consultation

Good morning,

BEAR Scotland has been commissioned by Transport Scotland to undertake de-scaling, grit-blasting, and painting of both main girders on the underside of the A828 60 Creagan Bridge (NM 97811 44339).

Creagan Bridge spans and has potential connectivity with several Natura 2000 sites (see list below). As part of the pre-application process, a likely significant effect (LSE) screening has been carried out to determine whether any of the activities planned could have a LSE on any of the qualifying features of the relevant sites (see attached).

Location of the Site



Description of Works

Works are currently proposed to commence in April or May 2020 with the aim to be completed by October 2020 (approximately 6-month programme). At present, there are no plans for night working. The works are required to repair deteriorated coating on the bridge and to prevent further deterioration to the structure. Works will entail de-scaling, grit-blasting, and painting of the main girders on the underside of the bridge deck. Access will be provided by an underslung scaffold spanning over the water, which will be completely encapsulated to prevent materials or pollution entering the water. There may also be a scaffold tower at one of the southern bridge abutments to provide access. Currently, no works are planned to be carried out in the water.

Designated sites

- Loch Creran SAC
- Glen Creran Woods SAC
- Eileanan agus Sgeiran Lios Mor SAC
- Glen Etive and Glen Fyne SPA
- Loch Creran MPA (NC) – **note this is not a Natura 2000 site**

Please find attached a spreadsheet to show the screening stage for LSE for the above qualifying interests. I would appreciate it if you could confirm whether SNH agrees with our assumptions. Please also note that we have scheduled an ecological walkover survey to be carried out by terrestrial and aquatic ecologists to identify any constraints in proximity to the bridge.

With standard good practice measures in place, including full containment of the working area, pollution prevention measures, and noise reduction measures, we do not expect a pathway to effect, and therefore do not anticipate LSE for any of the features.

We assume that a Statement to Inform Appropriate Assessment (SIAA) will be required and BEAR Scotland would produce this on behalf of Transport Scotland as the competent authority for roads and bridges. Please can you confirm if SNH is in agreement?

Please note that we also intend to consult with Marine Scotland. If you are able to advise on the process for assessing impacts on MPAs, it would be appreciated.

Many thanks,
Carolyn

Carolyn Gillen

Environmental Advisor

BEAR Scotland | North West Unit

Direct dial: 0330 008 0551 | Ext:2551 | e-mail: cgillen@bearsotland.co.uk

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