

A6 Londonderry to Dungiven dualling

Review of the Environmental Statement and
Habitats Regulations Assessment

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Quality information

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1. Introduction

This review document has been prepared to fulfil a commitment made by the then DRD Minister, Ms Michelle McIlveen, in her Ministerial Statement of 24 February 2016 to undertake a review of the Environmental Statement (ES) and Statement to Inform the Appropriate Assessment (SIAA) prior to Making the Vesting Order.

The Environmental Statement for the Scheme was published in December 2011 which included a full suite of ecological surveys and assessment of the impacts on European sites.

A Stage 2 Appropriate Assessment for the River Faughan & Tributaries Special Area of Conservation (SAC), and a Stage 1 Screening for the River Roe & Tributaries SAC, were published alongside the ES in December 2011.

Subsequent to this, a Stage 2 Appropriate Assessment for the River Roe & Tributaries SAC was published in December 2013, and a review and update of the Stage 2 Appropriate Assessment for the River Faughan & Tributaries SAC was published in March 2014.

Since then, the most significant development has been the decision to implement the scheme by way of phased construction. It is intended to construct the scheme from Dungiven (including Dungiven Bypass) to Drumahoe as a single contract (Phase 1), with the section from Drumahoe to Stradreagh (and the associated A2 Caw to Maydown dualling upgrade) constructed at a later date (Phase 2).

2. Review of the Environmental Statement

The Environmental Statement (and draft Direction Order, and draft Vesting Order) for the entire scheme was published in December 2011. The Public Inquiries into the scheme were held between 24 September and 02 October 2012.

The scheme design for Phase 1 remains largely unchanged from that assessed as part of the original ES, except for the tie-in arrangement at Drumahoe. Minor changes have been made following recommendations made in the Inspectors' Report and subsequent dialogue with affected landowners. A review has been undertaken of the various topic headings reported in the December 2011 Environmental Statement for Sections 1 (Londonderry to Claudy) and 2 (Claudy to Dungiven). This is summarised below.

2.1 Air Quality

No significant change in forecasted air quality from the original assessment. Phased construction will mean some of the 'Negligible' air quality benefits forecasted for Drumahoe will now not be realised until Phase 2 (Drumahoe to Stradreagh / Caw) is implemented.

2.2 Cultural Heritage

No significant change in cultural heritage impact from the original assessment. Work is ongoing to resolve archaeology and other heritage issues in advance of construction by way of two advance archaeology contracts or Lots. Lot 1 is the trial trenching (c. 2250no.) of Phase 1 of the scheme between Dungiven and Drumahoe; these works commenced w/c 31 July 2017. Lot 2 is the archaeological resolution of 6no. discrete potential hotspots along the scheme; these works have been ongoing since w/c 19 June 2017 and are nearing completion.

It is envisaged that all archaeology along the scheme will be investigated / resolved on-site by the end of 2017 (approximately).

2.3 Ecology & Nature Conservation

No significant change in the overall ecological and nature conservation impact from the original assessment is anticipated. The adverse ecological impacts will now not be experienced in the Faughan Valley between Drumahoe and Stradreagh until Phase 2 of the scheme is constructed.

Nevertheless, considering the time lapse between the original ecological assessment (2010 / 2011) and now, it is important that the ecological baseline is updated to accurately determine the potential impact on protected species and habitats, so that the existing mitigation strategy can be adopted or amended as necessary. This implements a commitment made in the original ES, that pre-construction surveys would be undertaken. With this in mind, a full suite of ecological surveys have been ongoing since late 2016 (in the appropriate field season), between Dungiven and Drumahoe (Phase 1), including:

- Phase 1 Habitat survey;
- Invasive species survey;
- Badger survey;
- Otter survey;
- Bat survey;
- Smooth Newt survey;
- Viviparous Lizard survey;
- Breeding bird survey;
- Fisheries & Aquatic Ecology survey.

The Fisheries and aquatic ecology survey work includes Physical Habitat survey, Benthic Macroinvertebrate survey, Fish Habitat survey, and Juvenile Fish Stock survey, the scope of which has been consulted upon and agreed with both NIEA – Water Management Unit and Loughs Agency.

These surveys will be written-up in a series of individual reports, documenting the findings of the baseline surveys, potential impacts, and to update (as required) appropriate mitigation. These will then be consulted upon with NIEA – Natural Environment Division (NED) (and Loughs Agency where appropriate) to agree the overall mitigation strategy to be adopted in advance of and during construction.

2.4 Landscape & Visual

No significant change in landscape & visual impact from the original assessment, except that adverse landscape & visual impacts will now not be experienced in the Faughan Valley between Drumahoe and Stradreagh until Phase 2 of the scheme is constructed.

As per the mitigation requirement contained in the original ES, a Landscape Planting design has been developed and included in the Contract Documents, which will be further developed / refined by the ultimately appointed Contractor.

2.5 Land Use

No significant change in land use impacts from the original assessment. Phased construction means land loss will now not be experienced in the Faughan Valley between Drumahoe and Stradreagh until Phase 2 is constructed. A planning trawl and review of recent planning applications has been undertaken.

Negotiations are ongoing with the various affected landowners along Phase 1 to agree accommodation works.

2.6 Noise & Vibration

No significant change in noise & vibration from the original assessment. Phased construction will mean some of the noise benefits forecasted for Drumahoe will now not be realised until Phase 2 (Drumahoe to Stradreagh / Caw) is implemented.

2.7 Pedestrian, Cyclist, Equestrian & Community Effects

No significant change in pedestrian, cyclist, equestrian or community effects from the original assessment. Phased construction will mean some of the community benefits forecasted for Drumahoe (e.g. slight reduction in community severance) will now not be realised until Phase 2 (Drumahoe to Stradreagh / Caw) is implemented.

2.8 Vehicle Travellers

No significant change in either 'Driver Stress' or 'Views from the Road' from the original assessment. Phased construction will mean some of the driver stress reduction benefits forecasted for Drumahoe will now not be realised until Phase 2 (Drumahoe to Stradreagh / Caw) is implemented.

2.9 Road Drainage & the Water Environment

There has been no fundamental change to the road drainage design. No significant change in the Water Environment impact is envisaged from the original assessment.

The Water Framework Directive (WFD) Assessments (one each for the Faughan and Roe systems) will be updated for the scheme, once the current round of fisheries and aquatic ecology surveys have been completed (likely to be November / December of this year). These WFD Assessments will be issued to NIEA – Water Management Unit for agreement on the overall water environment mitigation strategy. At this stage, however, it is not envisaged that there will be any significant changes to the drainage design / mitigation strategy.

2.10 Geology & Soils

No significant change in geology & soils impact from the original assessment.

Investigation into two recently discovered areas of potential contamination (Claudy and Ovil Hill) has recently been completed. Of the materials tested, and subsequent interpretation and reporting, the total and leachable concentrations within soil, and the risk associated with re-use of all stockpiles on the sites (in the context of a roadway end use) is considered to be low. All stockpiles are considered (from a geo-environmental perspective) suitable for re-use at both sites for backfilling.

2.11 Conclusions

Based on the foregoing, it is concluded that phased construction will mean that some of the adverse impacts predicted for the Faughan Valley (Phase 2: Drumahoe to Stradreagh) will now not be realised until that section is constructed. Similarly, some of the predicted benefits for Drumahoe will again not be realised until Phase 2 is constructed.

A suite of ecological survey updates is currently underway to inform and refine the mitigation strategy. The updates to the WFD Assessments (based on the ongoing update to the baseline conditions) will also inform (and most likely confirm) the drainage/aquatic environment mitigation strategy.

Overall, there will be no significant changes in environmental impact that have not already been considered, assessed, and appropriately mitigated.

3. Review of the Habitats Regulation Assessment

3.1 River Faughan & Tributaries SAC

The River Faughan & Tributaries cSAC was “identified” [by NIEA – Natural Heritage] in August 2008 and was “accepted” as a Site of Community Importance (SCI) [by the European Commission] in December 2009. The River Faughan & Tributaries had been “identified” for its populations of Atlantic salmon (the prime selection feature), Old Sessile oak woodland, and Otter (*Lutra lutra*) populations. In July 2013, the site was formally ratified by Defra as a Special Area of Conservation (SAC), making no changes to either the boundary of the site or the qualifying interests.

The River Faughan itself would be crossed at two locations, namely (i) By the mainline at Mobuoy, between Drumahoe and Stradreagh, and (ii) By the Ardmore Road realignment at Burntollet.

One of the Faughan’s key tributaries (the Burntollet River – also part of the SAC designation) would also be crossed by the mainline at Burntollet.

A key design consideration was that all three crossings of the SAC were on clear span structures, with no direct impact within the SAC designated boundary. Nevertheless, at Burntollet, the abutments associated with the existing mainline bridge structure over the Burntollet River currently form the river bank on both sides. To facilitate construction of the new mainline clear span bridge, the existing bridge will have to be removed. Moreover, the associated abutments may have to be removed, thus necessitating temporary works within the SAC.

Based on a Stage 1 Screening assessment, sufficient uncertainty remained as to whether the scheme would have a significant effect on the integrity of the River Faughan & Tributaries SAC, and this was reported in the Stage 1 Test of Significance, dated March 2009.

On this basis, the assessment progressed to a Stage 2 Appropriate Assessment. The findings of this assessment were reported in a Statement to Inform the Appropriate Assessment (SIAA) (Draft), dated December 2011. This coincided with publication of the Environmental Statement (also in December 2011).

Based on consultation feedback from NIEA – Natural Heritage in August 2012, the SIAA was updated in August 2012.

The SIAA was reviewed and updated again in March 2014 (branded River Faughan & Tributaries SAC – Statement to Inform the Appropriate Assessment – Review & Updates March 2014). This was the last update of the document undertaken.

3.2 River Roe & Tributaries SAC

The River Roe itself would be traversed by the mainline south of Dungiven, west of Dungiven Priory. The Owenrigh River (a major tributary of the Roe and part of the SAC designation) would also be traversed by the mainline south of Dungiven. The Owenbeg River (another major tributary of the Roe and part of the SAC designation) would be traversed by the mainline south of Dernaflaw / Owenbeg. The original scheme design encroached into the SAC designation at approximately three locations, namely (i) south-east of the Dungiven (east) Roundabout, where mainline earthworks spill into the SAC, (ii) at the Owenrigh River crossing, where mainline earthworks again encroach into the SAC, and (iii) at the Owenbeg River crossing, where a retaining wall structure and mainline earthworks encroach into the SAC.

Based on a Stage 1 Screening assessment, it was concluded the scheme would not have a significant effect on the integrity of the River Roe & Tributaries SAC, and this was reported in the “*Article 6 Screening Matrix for A6 Claudy to Dungiven Roads Scheme (‘Test of Likely Significance’)*”, dated December 2011. The River Roe & Tributaries had been “identified” for its populations of Atlantic salmon (the prime selection feature), *Ranunculus* rivers, Oak woodland, and Otter (*Lutra lutra*) populations.

The Stage 1 Screening was re-examined to verify it was a robust assessment. The ensuing Stage 1 Screening concluded that, in the absence of mitigation measures, it could not rule out likely significant effects upon the notified interests of the River Roe & Tributaries SAC. Applying the precautionary principle, which requires that the

conservation objectives of a European site should prevail where there is uncertainty, an Appropriate Assessment was undertaken so that residual impacts were fully considered. The findings were reported in a document branded “*A6 Claudy to Dungiven Road Scheme – Habitat Regulations Assessment – Statement to Inform an Appropriate Assessment*” dated December 2013. This was the last update undertaken.

The structural specification has been developed and refined so that physical encroachment within the River Roe & Tributaries SAC at the three locations referred to above is avoided.

3.3 Review of Conservation Objectives

Conservation objectives for both sites were originally published in 2008; for the River Faughan & Tributaries they were entitled “*Draft ASSI Conservation Objectives*” but were the same for the cSAC, and even though they were labelled “*draft*”, they were being implemented. For the River Roe & Tributaries they were entitled “*SAC Conservation Objectives*”.

Both sets of Conservation Objectives were revised, updated and re-published in 2015, and a summary of changes is provided below.

3.3.1 River Faughan & Tributaries SAC

The Conservation Objectives for this site remain essentially unchanged. The wording has been subtly amended with no material difference resulting.

Original [2008] wording: “*To maintain each feature in favourable condition*”.

New [2015] wording: “*To maintain (or restore where appropriate) the:*

- Atlantic Salmon *Salmo salar*
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
- Otter *Lutra lutra*

to favourable condition”.

The original version of the Conservation Objectives were draft ASSI objectives. These have now been updated to specific SAC objectives and contain updated details on monitoring features, status of features etc. and nitrogen deposition information.

3.3.2 River Roe & Tributaries SAC

Similarly, the Roe is exactly the same; the Conservation Objectives are essentially unchanged. The wording has been subtly amended with no material difference resulting.

Original [2008] wording: “*To maintain each feature in favourable condition*”.

New [2015] wording: “*To maintain (or restore where appropriate) the:*

- Atlantic Salmon *Salmo salar*
- Water courses of plain to montane levels with the *Ranunculus fluitans* and *Callitricho-Batrachion* vegetation
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
- Otter *Lutra lutra*

to favourable condition”.

The original version of the Conservation Objectives were SAC objectives. These have now been updated, including details on monitoring features, status of features etc. and nitrogen deposition information.

3.4 Review of Selection Features

3.4.1 Atlantic Salmon

As part of the suite of pre-construction ecological survey updates being undertaken in 2017, a fisheries and aquatic ecology survey is currently underway along the Phase 1 crossing points of the River Faughan and River Roe systems. This includes physical habitat surveys, benthic macroinvertebrate surveys, fish habitat surveys, and juvenile fish stock surveys. The survey work is ongoing across the seasons spring/summer and autumn/winter to establish a robust baseline, and will be completed in late November 2017. At this stage, due to the refined structural specification and avoidance of direct physical encroachment within the respective rivers, it is envisaged that there will be no significant effect on the overall Atlantic salmon population or their distribution within the River Faughan and River Roe systems.

3.4.2 Old Sessile Oak Woodland

The original HRA document (Section 1 – River Faughan & Tributaries SAC) made a number of key observations in relation to oak woodland:

1. It was recognised that the scheme would impinge on riparian woodland (though not selection feature old sessile oak woodland) within the SAC boundary at the bridge crossing point at Burntollet (Section 7.3.1);
2. Only a very small amount of other, non-selection feature woodland would be lost due to the scheme, though this was not within the SAC boundary (Section 10.2);
3. The scheme would not impact upon the integrity of the old sessile oak woodland feature (Sections 6.3.2, 10.2).

The locations of the main blocks of old sessile oak woodland were outlined in the HRA document and described in detail, including those which were in the vicinity of the scheme and not being impacted by it.

The Section 2 HRA document (River Roe & Tributaries) also concluded that although some land would be lost at the river crossing points, none of the features for which the site has been designated would be lost.

The locations where Phase 1 of the scheme crosses the SAC boundary were re-visited in June 2017 to investigate if any changes to the woodland had occurred since publication of the original HRA in 2011.

Each location along the planned scheme which may directly affect SAC notified interest features was surveyed, including river crossing points and headwalls which extend into the SAC boundaries. The findings of the most recent surveys concur with the previous work completed in 2011 and updated in 2014.

Whilst the planned scheme extends into the SAC and the construction footprint is within [over] the SAC, no notified interest feature habitats or species (in this case, old sessile oak woodland) will be impacted within the SAC boundaries.

3.4.3 Otter

As part of the suite of pre-construction ecological survey updates currently underway, an Otter survey of the entire length of Phase 1 of the scheme was undertaken in Spring 2017, which identified otter holts and associated evidence along both the rivers Faughan and Roe and their associated tributaries. A high degree of activity was noted along the river systems, which was also evident back in 2010/2011 during the original survey programme. It is envisaged that there still will be no significant effect on the overall otter population or their distribution within the River Faughan and River Roe systems.

3.4.4 *Ranunculus* rivers (River Roe SAC only)

A selection feature habitat (for the River Roe & Tributaries SAC only), is watercourses of plain to montane levels with the *Ranunculus fluitans* and *Callitricho-Batrachion* vegetation.

The locations where the scheme crosses the SAC boundary were re-visited in June 2017 to investigate if any changes to the vegetation had occurred since publication of the original HRA.

As with the old sessile oak woodland, each location along the planned scheme which may directly affect SAC notified interest features was surveyed, including river crossing points and headwalls which extend into the SAC boundaries. The findings of the most recent surveys concur with the previous work completed in 2011 and updated in 2013.

Whilst the planned scheme extends into the SAC and the construction footprint is within [over] the SAC, no notified interest feature habitats or species (in this case, *Ranunculus* vegetation habitat) will be impacted within the SAC boundaries.

3.5 Conclusions

The findings of this review are consistent with those presented in the original HRA documentation. The overall conclusion also remains unchanged, that the planned scheme will have no significant effects on the notified species or habitats of any Natura 2000 site or its integrity.

