

Technical Appendix 9.4: Consultation Records;

Dfl Rivers Lisburn



Department for

Infrastructure

An Roinn

Bonneagair

www.infrastructure-ni.gov.uk

Kyle Somerville
McCloy Consulting Engineers
Mossley Mill
Lower Ground (West)
Carnmoney Road North
Newtownabbey
BT36 5QA

Ravarnet House
36 Altona Road
Lisburn
BT27 5QB
Tel: 028 9260 6100

Your Ref: M01616-23
Our reference: IN1-21-19677

07 February 2022

Dear Kyle

**RE: SCHEDULE 6 APPLICATION FOR STORM DISCHARGE
TO A WATERCOURSE**

UNSHINAGH WIND FARM, WEST OF A42, BALLYMENA ROAD, CARNLOUGH

I refer to your e-mail and application dated 9TH November 2021 along with accompanying details regarding the above.

Following assessment by Dfl Rivers' environment section regarding the above in relation to the Habitats Regulations, my comments are as follows:

Dfl Rivers is satisfied with your proposals for storm discharge at your stated total max. attenuated Greenfield run-off rate of 128 litres/sec from the above site to the various watercourses, as shown on your submitted maps. These watercourses are undesignated under the terms of the Drainage (Northern Ireland) Order 1973.

Responsibility for the accuracy of the Greenfield calculations at each discharge location within the various catchments, lies with the applicant and his/her professional advisers.

The outfall structures should be made to the required specification as shown on your submitted drawings, to provide bed and bank protection to the watercourse and angled in the direction of flow.

Attenuation methods are to be by using appropriate storage systems within the site, as shown on your submitted drawing no. SWMP_204.

The Department would stress that it is the applicant's responsibility to ensure that the proposed works does not result in any obstruction to flow arising from a blockage, structural failure, poor workmanship or any other reasons.

Riparians/developers should fully satisfy themselves that any proposal will not in any way increase the flood risk within the catchment.

It is the applicant's responsibility also to obtain all necessary wayleaves/landowner permissions to carry out the works.

You should note that, in accordance with Paragraph 11 of Schedule 6 of the Drainage (Northern Ireland) Order 1973, any consents/ approvals given by DfI Rivers under Schedule 6 shall not affect the liability of any riparian/developer to comply with other legislation. It is your responsibility to contact any other parties which may have an interest in your proposals e.g. NIEA, Landowners, Fisheries etc.

This consent is valid for a period of 24 months from the date of this letter. If proposals are not completed within this period of time they should be resubmitted for further appraisal.

Please see the below link for guidance on pollution prevention when working in or near water.

https://www.netregs.org.uk/media/1418/gpp-5-works-and-maintenance-in-or-near-water.pdf?utm_source=website&utm_medium=social&utm_campaign=GPP5%2027112017

Please feel free to contact me if you have any queries and quote the reference number at the top of this letter in any future correspondence.

Yours sincerely

A handwritten signature in black ink that reads "Kevin Scullion". The signature is written in a cursive style with a large, sweeping 'K' and 'S'.

Kevin Scullion



Department for

Infrastructure

An Roinn

Bonneagair

www.infrastructure-ni.gov.uk

Belfast Planning Service
Belfast City Council
Cecil Ward Building
4-10 Linenhall Street
Belfast
BT2 8BP
FAO Louise Leighton

44 Seagoe Industrial Estate
CRAIGAVON
Co. Armagh
BT63 5QE
Tel: 028 3839 9118

Your Ref:
LA02/2021/0939/DETEIA
Our Ref: IN1-21-18075
14th December 2021

Dear Sir/Madam,

Re: Intention to submit Environmental Statement for Proposed Unshinagh Wind Farm comprising 14 three-bladed horizontal axis wind turbines, each up to a maximum of 180m tip height associated external electricity transformers; underground cabling; a newly created site entrance; access tracks; turning heads; crane hard-standings; control building and substation compound, energy storage containers, off-site areas of widening to the public road and all ancillary works. During construction and commissioning there would be a number of temporary works including a construction compound with car parking; temporary parts of crane hardstandings; welfare facilities and temporary guyed meteorological masts. Location: Drumourne, Unshinagh Mountain, Unshinagh South, Ticloy, Slane, Cregcattan (part of Galdanagh) and Aughareamlag, approximately approximately 4 km south west of the village of Carnlough village Co. Antrim., Applicant: Renewable Energy Systems

Thank you for your DETEIA Consultation dated 12th October 2021 regarding the above proposal. DfI Rivers PAMU comments below are related to the current Revised Planning Policy Statement 15 dated September 2014.

The site is affected by numerous watercourses within the red line boundary indicated on Drawing 04291-RES-LAY-DR-LE-001. For future consultations regarding this proposal a clearer maps to establish the exact site boundaries will be required.

A Flood Risk and Drainage Assessment is required (See FLD1 and FLD3).

FLD 1 - Development in Fluvial (River) and Coastal Flood Plains. DfI Rivers Flood Maps (NI) show the site is affected by numerous watercourses which are not modelled. In accordance with PPS 15, FLD 1, Development will only be suitable to that part of the site which is found to be outside the determined flood plain. Taking the precautionary approach embodied within PPS 15, DfI Rivers PAMU recommends that the applicant's agent establishes a Q100 level of all the undesignated watercourses within the site.

Any portion of the site shown to be located in the Q100 flood plain can only be developed through meeting the Exceptions Test. It is the remit of the planning authority to grant such an exception. If Planning Authority deems this application to be an exception, then the planning applicant is required to submit a Flood Risk Assessment to allow proper consideration of the flood risk.

The developer should be advised that for design purposes all finished levels should be placed at a minimum of 600mm above the appropriate Q100 fluvial flood + Climate Change levels.

Planning authority should be aware that the Department for Infrastructure updated its Technical Flood Risk Guidance in relation to Allowances for Climate Change in Northern Ireland on 25th February 2019.

The Guidance and associated documentation can be accessed or downloaded via the Department for Infrastructure's web page as follows:- <https://www.infrastructure-ni.gov.uk/publications/technical-flood-risk-guidance-relation-allowances-climate-change-northern-ireland>

FLD 2 – Protection of Flood Defence and Drainage Infrastructure. The site is affected by numerous watercourses. Sub-Policy FLD2 states planning authority will not permit development that would impede the operational effectiveness of flood defence and drainage infrastructure or hinder access to enable their maintenance. Also paragraph 6.32 states where a new development proposal is located beside watercourse it is essential that an adjacent working strip is retained to facilitate future maintenance. The working strip should have a minimum width of 5 metres, but up to 10 metres where considered necessary, and be provided with clear access and egress at all times.

FLD 3 - Development and Surface Water (Pluvial) Flood Risk Outside Flood Plains.

For this application DfI Rivers advises that in accordance with the Revised PPS 15, Planning and Flood Risk, FLD 3, Development and Surface Water (Pluvial) Flood Risk outside Flood Plains, a **Drainage Assessment is required** because:

- It is a development in excess of 1 hectare
- It is a change of use involving new buildings and or hard standing exceeding 1000 square metres
- Surface water run-off from the development may adversely impact other development or features.

DfI River's Flood Maps (NI) indicate the proposed development is located in an area where there is evidence of surface water flooding.

The Revised Policy PPS 15 FLD 3 states that the Drainage Assessment demonstrates that adequate measures will effectively mitigate flood risk. In carrying out the drainage assessment (refer to Annex D of the Revised PPS 15: Assessing Flood Risk and Drainage Impact) the applicant should acquire from the relevant authority evidence that the proposed storm water run-off from the site can be safely discharged.

If the proposal is to discharge into a watercourse then an application should be made to the local DfI Rivers office for consent to discharge storm water under Schedule 6 of the Drainage (NI) Order 1973. **Any Schedule 6 agreement should be included within the Drainage Assessment to confirm DfI Rivers local area office is in agreement to this proposed arrangement.**

If it is proposed to discharge storm water into an NI Water system then a Pre-Development Enquiry should be made and if a simple solution cannot be identified then a Network Capacity Check should be carried out. **Correspondence with both authorities should be included in the drainage assessment regardless of outcome.**

Due to downstream flooding beyond the site, **the Drainage Assessment will have to demonstrate how the development will limit/restrict and attenuate the surface water discharge from the site to Greenfield run-off rates.** Please ensure the issue of overland flow both to and from the site is addressed. Consideration should be given to the use of SuDs.

In order to comply with NI Water Sewer for adaption, please supply within the Drainage Assessment:

- a) Evidence of any attenuation calculations to show that the system will not flood any part of the site in a 1 in 30 year designed event whilst retaining a 300mm free-board within the manholes network
and
- b) Carry-out checks and show that during exceedance of the 1 in 30 year pipe design for up to a 1 in 100 year return period, that the properties will not flood and the flow path and location of surplus storage on site.

FLD 4 – Artificial Modification of Watercourses.

Policy FLD 4 states that “The planning authority will only permit the artificial modification of a watercourse, **including culverting** or canalisation operations, in either of the following **exceptional circumstances**:

- Where the culverting of short length of a watercourse is necessary to provide access to a development site or part thereof;
- Where it can be demonstrated that a specific length of watercourse needs to be culverted for engineering reasons and that there are no reasonable or practicable alternative courses of action”.

Approval for any such culverting should have the prior consent of DfI River’s local area office prior to Planning authority permitting the proposed culverting.

FLD5 - Development in Proximity to Reservoirs.

Not applicable.

Under the terms of Schedule 6 of the Drainage (NI) Order 1973, any proposals either temporary or permanent, in connection with the development which involves interference with any watercourses such as culverting, bridging, diversion, building adjacent to or discharging storm water etc requires the written consent of DfI Rivers. This should be obtained from the Eastern Regional Office at Ravarnet House, Altona Road, Largymore, Lisburn BT27 5QB.

Please quote our reference number above on any future correspondence.

Michael Sands
Planning Advisory Modelling Unit

Dfl Rivers Lisburn



Department for

Infrastructure

An Roinn

Bonneagair

www.infrastructure-ni.gov.uk

Mr. Iain Muir
McCloy Consulting
Mossley Mill
Lower Ground (West)
Carnmoney Road North
Newtownabbey
BT36 5QA

Ravarnet House
36 Altona Road
Lisburn
BT27 5QB
Tel: 028 9260 6100

Your reference: M01616-23
Our reference: IN1-21-4873

31 March 2021

Dear Mr. Muir,

RE: M01616-23 PROPOSED DEVELOPMENT INFORMATION REQUEST

Thank you for your email dated 15 March 2021 regarding the above. From a drainage aspect my comments are as follows.

There are no designated watercourses or culverts under the terms of the Drainage (Northern Ireland) Order 1973 within or bounding your site. The Department does not maintain a database of undesignated watercourses, which may be present. In this regard, you are advised to consult with Ordnance Survey and/or undertake site inspections, etc. The Department has no record of any historical flood calls at the location of your proposed site.

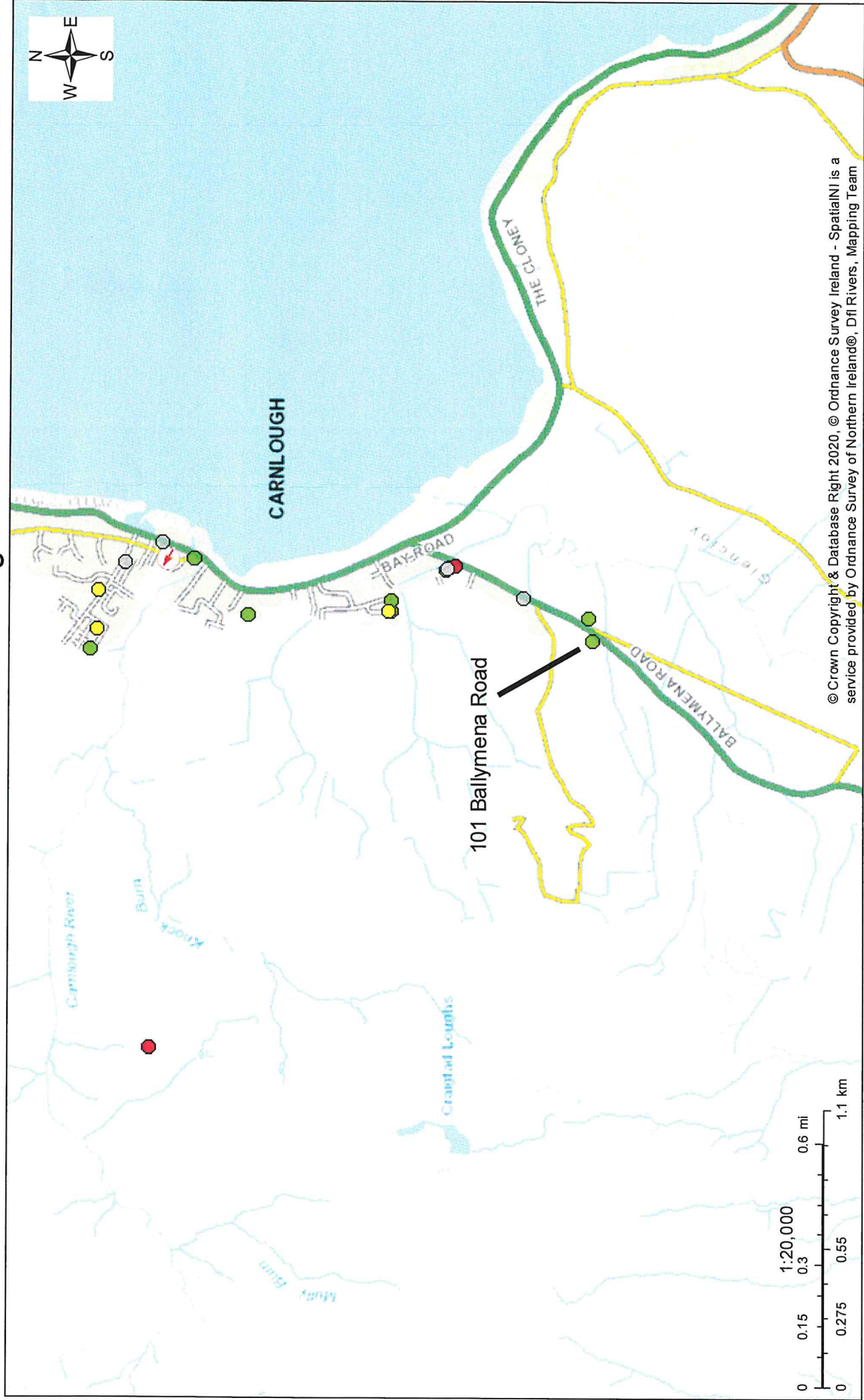
The Department has no record of any flood calls on or immediately downstream of the proposed site. However, I can confirm that the nearest flood call downstream to your proposed site is at 101 Ballymena Road, Carnlough, along with a number of others in the Carnlough area indicated with a coloured dot as shown in the attached map.

Please quote above reference number on any further correspondence.

Yours Sincerely

Mark Scott
Engineering Section

Flood Calls - Carnlough



31/03/2021 14:53:23

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- Lines**
- Override 1
 - Flooding Hotspots
 - Flood Reports (< 1 Month)
 - Flood Reports (Closed)
 - Rivers Agency
 - Water Service
 - Roads Service
 - Other
 - Aerial Photo Refs
 - Photos with orientation

Iain Muir

From: Patterson, Jennifer <Jennifer.Patterson@daera-ni.gov.uk>
Sent: 16 March 2021 07:48
To: Iain Muir
Cc: DWI; PWS
Subject: PWS 1535 Site at Glenarm, County Antrim. Your ref: M01616-23 Proposed Development Information Request
Attachments: SPATIAL NI DRINKING WATER INSPECTORATE PRIVATE WATER SUPPLIES APP 2021.pdf

PWS 1535

Good Morning Iain,

Site at Glenarm, County Antrim. Your ref: M01616-23 Proposed Development Information Request

Please see attached document in response to your request for information on private water supplies. This document contains a link to the Drinking Water Inspectorate's Private Water Supplies app which will enable you to identify if there are any registered private water supplies within the specified distances of the site/location.

Kind regards,

Jen

Jennifer Patterson | Drinking Water Inspectorate | Northern Ireland Environment Agency
Klondyke Building, Cromac Avenue, Gasworks Business Park, Lower Ormeau Road, Belfast, BT7 2JA
T: +44 (0) 28 9056 9474 | E: Jennifer.patterson@daera-ni.gov.uk
www.daera-ni.gov.uk

DAERA's Privacy Notice may be accessed at: <https://www.daera-ni.gov.uk/daera-privacy-statement>



From: Iain Muir [mailto:Iain.Muir@mccloyconsulting.com]
Sent: 15 March 2021 11:54
To: DWI <dwi@daera-ni.gov.uk>; PWS <privatewatersupplies@daera-ni.gov.uk>
Subject: M01616-23 Proposed Development Information Request

FAO: DAERA DWI / PWS
Our Ref: M01616-23

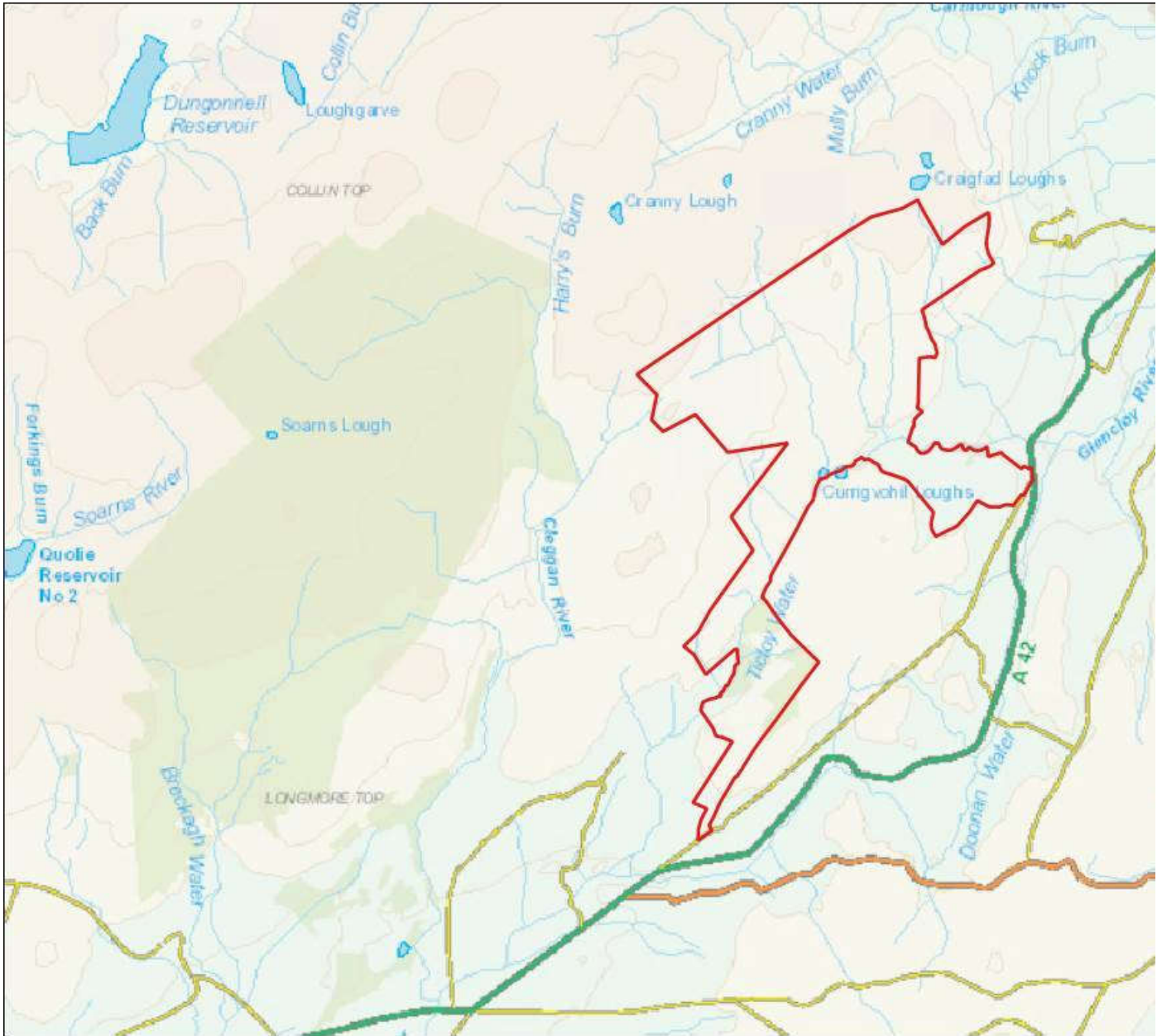
Dear Sir / Madam,

McCloy Consulting have been appointed to undertake a water and geology assessment for a proposed wind farm development west of Glenarm, Co. Antrim. The site centroid is **IG: 325541, 414833** – shown below. As part of this assessment we are required to establish the baseline conditions for the site.

We would be grateful if DWI could provide held records of private water supplies, both surface water and groundwater abstractions, within 5km of the outlined approx. site location.

If DWI holds any associated water quality data pertaining to PWS we would be grateful for this also.

If you require further information please let me know. Thanks in advance for your time.



Best regards
Iain

Iain Muir

Project Consultant | Belfast



E: Iain.Muir@mccloyconsulting.com | T: +44 (0) 28 9084 8694 | W: www.mccloyconsulting.com
Mossley Mill, Lower Ground (West), Carnmoney Road North, Newtownabbey BT36 5QA

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DRINKING WATER INSPECTORATE PRIVATE WATER SUPPLIES ON SPATIAL NI APP

General Information

A private water supply is any supply of water, intended for human consumption, not provided by the water undertaker, **NI Water Ltd**.

The location of private water supplies across Northern Ireland which have been registered with the Drinking Water Inspectorate (DWI) under **The Private Water Supplies Regulations (Northern Ireland) 2017** are available via a Spatial NI web based app:

<https://apps.spatialni.gov.uk/DrinkingWaterInspectorateApplication/>

Sites identifiable in the App

The Drinking Water Inspectorate **only** holds information on private water supplies registered with DWI under **The Private Water Supplies Regulations (Northern Ireland) 2017**. This includes supplies to public or commercial premises or two or more private dwellings where the water is used for drinking, cooking, food preparation or other domestic purposes. Both private water supplies currently monitored by DWI (status 'LIVE') as well as those historically monitored by DWI (status 'HISTORIC') are identifiable using the App.

Sites not identifiable in the App

DWI do **not** hold information on private water supplies used for:

- (i) domestic use in single private dwellings;
- (ii) primary production, such as dairy farms; or
- (iii) 'non-potable' purposes, e.g. cooling or heating water within a factory, where the water is **not** in contact with a final food product.

Therefore, **only** private water supplies registered with, and currently or historically monitored by, DWI are identifiable using this app. Note, the information on private water supplies is regularly reviewed and updated by DWI.

Searches on Spatial NI relating to Planning Applications

The applicant, or any person acting on behalf of the applicant, should ensure the details (including search date) and outcomes from searches undertaken for private water supplies, within Spatial NI, are suitably recorded in any documentation or report in support of the application. This should also include where a search has been undertaken and there have been no private water supplies identified from the Spatial NI dataset.

Instructions for using the app can be viewed using the 'About' icon in the app.

Sustainability at the heart of a living, working, active landscape valued by everyone.

Further Recommendations

It is recommended that, to ensure all private water supplies are captured in your search, you should carry out a wider scoping exercise. Premises/land in the vicinity of your area of interest should be examined to identify any private water supplies for which records are not held by DWI and a survey undertaken of surrounding properties to determine if they own or use a private water supply. This scoping exercise should encompass a desktop study of relevant Ordnance Survey maps, a site inspection, and any other relevant information.

Contact details for the Drinking Water Inspectorate

General Drinking Water queries: dwi@daera-ni.gov.uk

Private Water Supplies queries: privatewatersupplies@daera-ni.gov.uk

Sustainability at the heart of a living, working, active landscape valued by everyone.



An Agency within the Department of
**Agriculture, Environment
and Rural Affairs**
www.daera-ni.gov.uk



**INVESTORS
IN PEOPLE**

Iain Muir

From: Kinkead, John <John.Kinkead@daera-ni.gov.uk>
Sent: 15 March 2021 12:42
To: Iain Muir
Cc: Crime, Environmental
Subject: FW: M01616-23 Proposed Development Information Request

Iain
I have checked records held by NIEA Enforcement Branch regarding the area covered surrounding the proposed site outlined below. No records held of reported waste incidents or enforcement history.

Forwarded for your information.
Regards
John

John Kinkead
Assessment Unit
Northern Ireland Environment Agency
Klondyke Building
Gasworks Business Park
Ormeau Road
Malone Lower
Belfast BT7 2JA

Tel: (028) 9056 9793
email: john.kinkead@daera-ni.gsi.gov.uk

AssessmentUnit.RED@daera-ni.gov.uk



This e-mail and its contents concern an ongoing criminal investigation which may be subject of disclosure under the Criminal Procedure & Investigations Act 1996. Any further communications of any kind created as a result of this communication should be retained and brought to the attention of the writer for the purpose of disclosure.

From: Iain Muir [<mailto:Iain.Muir@mccloyconsulting.com>]
Sent: 15 March 2021 11:54
To: Crime, Environmental <EnvironmentalCrime@daera-ni.gov.uk>
Subject: M01616-23 Proposed Development Information Request

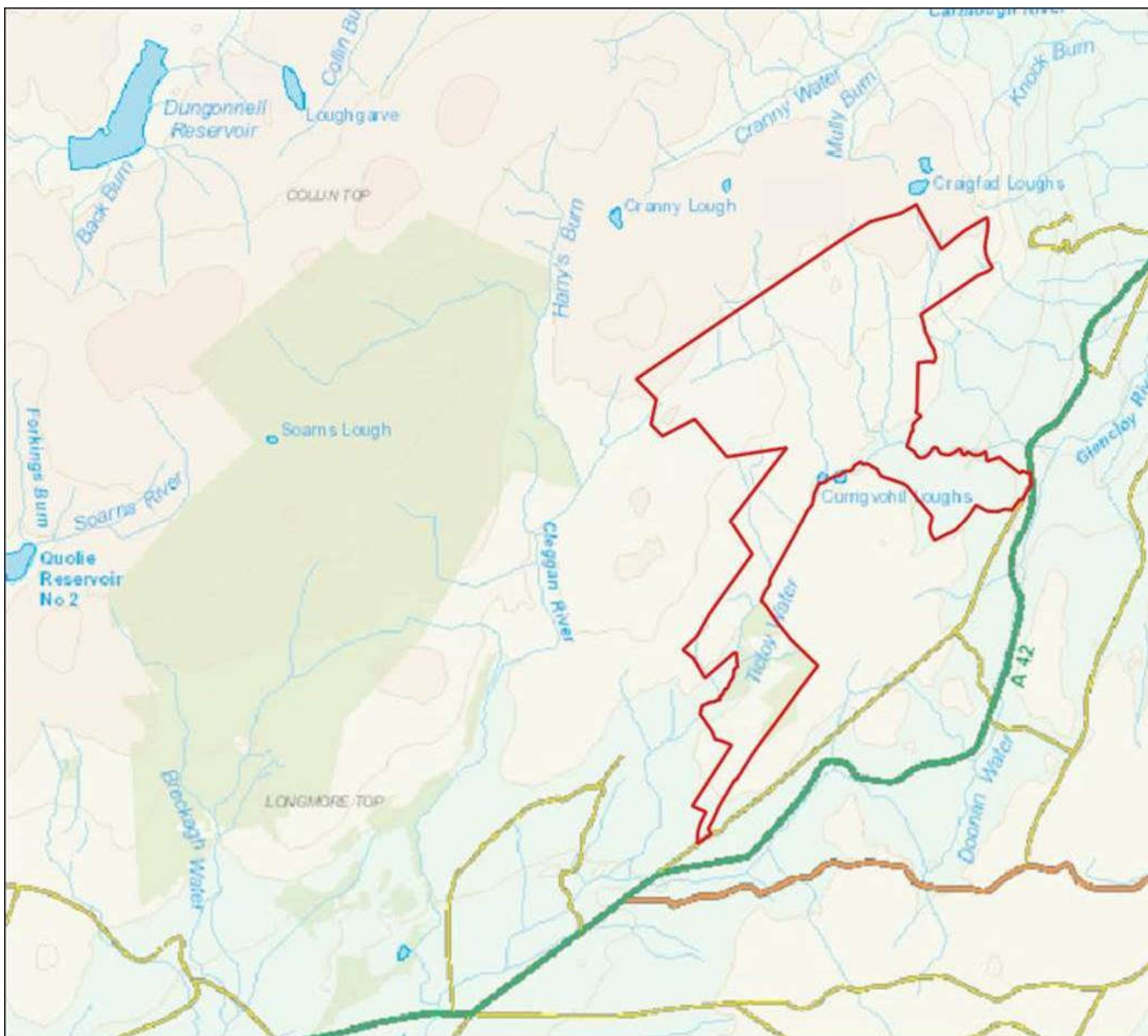
FAO: DAERA Environmental Crime Dept.
Our Ref: M01616-23

Dear Sir / Madam,

McCloy Consulting have been appointed to undertake a water and geology assessment for a proposed wind farm development west of Glenarm, Co. Antrim. The site centroid is **IG: 325541, 414833** – shown below.

As part of this assessment McCloy Consulting will assess the baseline conditions. Can you please assist by providing the details of any unlicensed landfills within 2km of the site.

Please do not hesitate to get in touch if you require any further information.



Best regards
Iain

Iain Muir

Project Consultant | Belfast



E: Iain.Muir@mccloyconsulting.com | T: +44 (0) 28 9084 8694 | W: www.mccloyconsulting.com
Mossley Mill, Lower Ground (West), Carnmoney Road North, Newtownabbey BT36 5QA

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Iain Muir

From: Fullerton, Gareth <Gareth.Fullerton@daera-ni.gov.uk>
Sent: 18 March 2021 15:08
To: Iain Muir
Subject: FW: M01616-23 Proposed Development Information Request

Hi Iain

Please see below from our Fish Health / Aquaculture team.

Thanks
Gareth

From: Maginnes, David
Sent: 18 March 2021 14:14
To: Fullerton, Gareth <Gareth.Fullerton@daera-ni.gov.uk>
Cc: Kane, John (DAERA) <John.Kane@daera-ni.gsi.gov.uk>
Subject: RE: M01616-23 Proposed Development Information Request

Hi Gareth

Tried to look at this days ago, GIS was super slow and crashed. Had a look at it today we have nothing land based in this area . Closest site is the salmon cages in Red Bay opposite side of the bay from the river mouth. Can't see an issue, only if large amount of suspended material was is the outflow and the tide / current ran it straight at the cages.

From: Fullerton, Gareth
Sent: 18 March 2021 13:30
To: Maginnes, David <David.Maginnes@daera-ni.gov.uk>
Subject: RE: M01616-23 Proposed Development Information Request

David

Have you been able to get a look at this proposal regarding any aquaculture sites downstream of the projects?

Thanks
G

From: Iain Muir [<mailto:Iain.Muir@mccloyconsulting.com>]
Sent: 15 March 2021 11:54
To: Fullerton, Gareth <Gareth.Fullerton@daera-ni.gov.uk>; Maginnes, David <David.Maginnes@daera-ni.gov.uk>
Subject: M01616-23 Proposed Development Information Request

FAO: DAERA Fisheries
Our Ref: M01616-23

Dear Gareth / David,

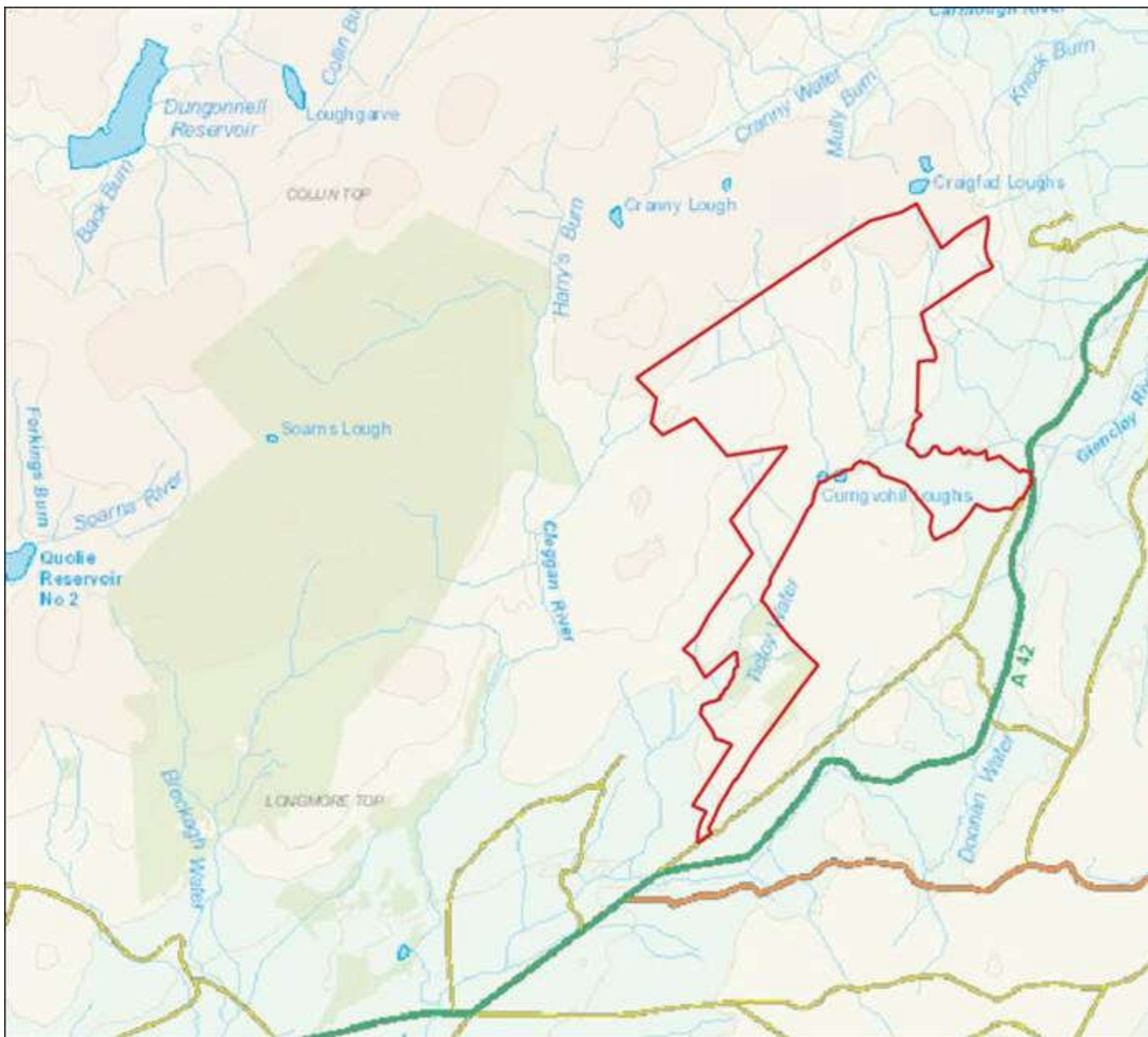
McCloy Consulting have been appointed to undertake a water and geology assessment for a proposed wind farm development west of Glenarm, Co. Antrim. The site centroid is **IG: 325541, 414833** – shown below.

As part of this assessment we are required to establish the baseline conditions for the site. Would it be possible for you to provide any information pertinent to fisheries that we should be aware of including:

- Details of any salmonid (or other) designations and / or aquaculture sites, for all watercourses in the vicinity of, and in the downstream catchments of the proposed development.
- Advise any further considerations that are deemed appropriate for a hydrological, hydrogeological or geological assessment at the site from your perspective.

If you have any queries about the above / wish to clarify anything please do not hesitate to get in touch.

Thanks in advance for your time.



Best regards
Iain

Iain Muir

Project Consultant | Belfast



E: Iain.Muir@mccloyconsulting.com | T: +44 (0) 28 9084 8694 | W: www.mccloyconsulting.com
Mossley Mill, Lower Ground (West), Carnmoney Road North, Newtownabbey BT36 5QA

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Iain Muir

From: Patton, Mark A.G. <magp@bgs.ac.uk>
Sent: 16 March 2021 13:01
To: Iain Muir
Cc: Parker, Kieran
Subject: M01616-23 Proposed Development Information Request
Attachments: GSNI Minerals Glenarm response .pdf

Iain

Attached response concerning the mineral licences. If you have any additional queries, please get in touch.

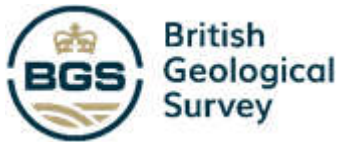
Kind regards

Mark

Mark Patton MSc, MCSM
Minerals Geologist, Geological Survey of Northern Ireland

P ~~+44 (0)28 9038 8462~~ (working from home)
e magp@bgs.ac.uk
w www.bgs.ac.uk

British Geological Survey | Dundonald House | Upper Newtownards Road | Belfast BT4 3SB | UK



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Geological Survey of Northern Ireland
Dundonald House
Upper Newtownards Road
Belfast
BT4 3SB

McCloy Consulting
Mossley Mill,
Lower Ground (West),
Carnmoney Road North,
Newtownabbey
BT36 5QA

Our Ref: 2345
Your Ref: M01616-23

Re: M01616-23 Proposed Development Information Request

Dear Iain

The site located west of Glenarm and identified on the map supplied on March 15th, no longer has any mineral prospecting licences active at the area. The licences has been relinquished. As such there is no constraint to the proposed development associated with active mineral development, licensed by the Department for the Economy, in the area.

The GSNI abandoned mines officer will address the abandoned mine matter separately.

Kind regards

GSNI Enquiries

Iain Muir

From: Wilson, Paul R. <paul2@bgs.ac.uk>
Sent: 20 April 2021 15:33
To: Iain Muir
Subject: Re: M01616-23 Proposed Development Information Request

Dear Iain,

I can address your enquiry regarding boreholes, springs and karst features.

All the data we have on these can be found on our Geindex at https://mapapps2.bgs.ac.uk/GSNI_Geindex/home.html. Select the hydrogeology theme and you can search for all these features in the Groundwater Data Repository and Karst Features layers.

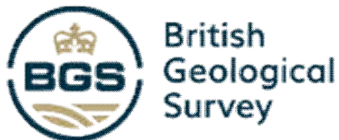
Yours sincerely,

Paul Wilson

Hydrogeologist - The Geological Survey of Northern Ireland

p +44 (0)28 90520973
e paul2@bgs.ac.uk
w www.bgs.ac.uk

British Geological Survey | Dundonald House | Upper Newtownards Road | Belfast BT4 3SB | UK



From: DfE GSNI <GSNI@economy-ni.gov.uk>
Sent: 20 April 2021 15:31
To: Wilson, Paul R. <paul2@bgs.ac.uk>
Subject: FW: M01616-23 Proposed Development Information Request

From: Iain Muir [mailto:Iain.Muir@mccloyconsulting.com]
Sent: 15 March 2021 11:54
To: DfE GSNI <GSNI@economy-ni.gov.uk>
Subject: M01616-23 Proposed Development Information Request

FAO: GSNI
Our Ref: M01616-23

Dear Sir / Madam,

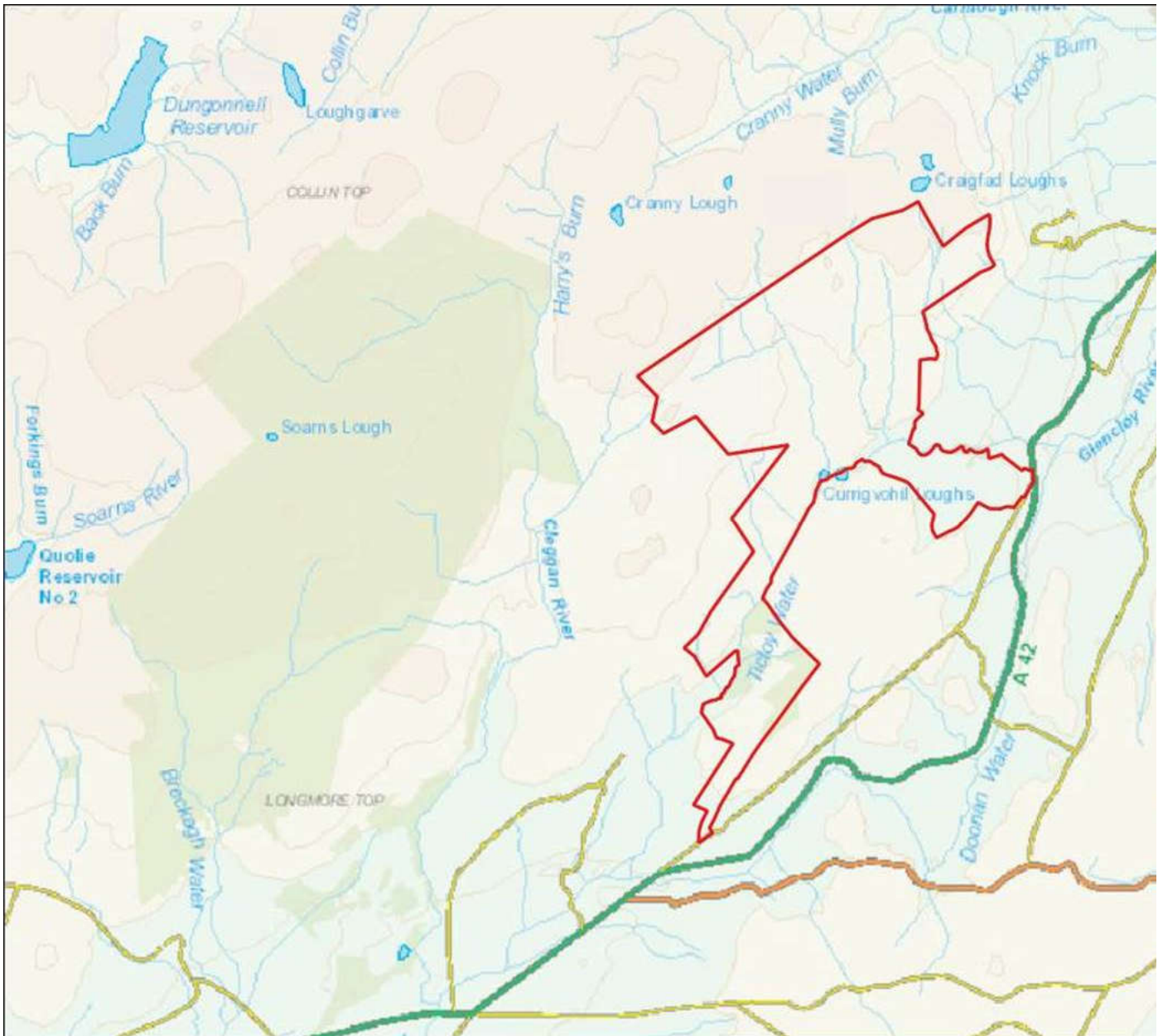
McCloy Consulting have been appointed to undertake a water and geology assessment for a proposed wind farm development west of Glenarm, Co. Antrim. The site centroid is **IG: 325541, 414833** – shown below.

As part of this assessment we intend to determine baseline geological / hydrogeological conditions and constraints, and identify any particular geohazards.

We would be grateful if GSNI could assist in providing details of any particular concerns or geohazards, for example;

- Boreholes and springs in close proximity to the proposed development site
- Karst features
- Peat slide hazards / land slide
 - In particular the landslip deposits to the north of the site, shown on Mass Movement 10k mapping layer
- Other geohazards GSNI would deem relevant for consideration in this assessment

If you require further information please let me know. Thanks in advance for your time.



Best regards
Iain

Iain Muir



E: Iain.Muir@mccloyconsulting.com | T: +44 (0) 28 9084 8694 | W: www.mccloyconsulting.com
Mossley Mill, Lower Ground (West), Carnmoney Road North, Newtownabbey BT36 5QA

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Iain Muir

From: Parker, Kieran <Kieran.Parker@economy-ni.gov.uk>
Sent: 16 March 2021 12:56
To: Iain Muir
Cc: Patton, Mark A.G.
Subject: RE: M01616-23 Proposed Development Information Request
Attachments: McCloy.zip

Hi Iain,

There are a number of mine workings within and in close proximity to the boundary. Not all of these have mine plans however there is one mine plan available from within the site – Cullinane mine. I have attached a file with shape files of the mine workings and mine plan. The mine plan can also be viewed at the link below.

[British Geological Survey \(BGS\) | large image viewer | IIPMooViewer 2.0](#)

These mine workings are shallow. Abandoned mines have the potential to be a constraint on any development within this area dependent on the proposed works and their location. A Mine Risk Assessment should be carried out as well as a landslide risk assessment as part of any planning proposal.

Get in touch if you have any questions.

Regards,

Kieran

From: Patton, Mark A.G. [mailto:magp@bgs.ac.uk]
Sent: 16 March 2021 09:09
To: Parker, Kieran <Kieran.Parker@economy-ni.gov.uk>
Subject: Fw: M01616-23 Proposed Development Information Request

Hi Kieran

see below from McCloy. Can you handle the mine abandonment aspect? I will create a shape file from the map and fire it over to you. (Not on the enquiries database yet.)

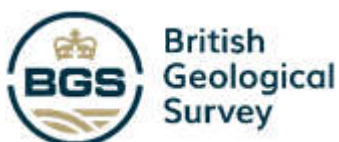
Cheers

Mark

Mark Patton MSc, MCSM
Minerals Geologist, Geological Survey of Northern Ireland

P ~~+44 (0)28 9038 8462~~ (working from home)
e magp@bgs.ac.uk
w www.bgs.ac.uk

British Geological Survey | Dundonald House | Upper Newtownards Road | Belfast BT4 3SB | UK



From: Iain Muir <Iain.Muir@mccloyconsulting.com>
Sent: 15 March 2021 11:53
To: Patton, Mark A.G. <maggp@bgs.ac.uk>
Subject: M01616-23 Proposed Development Information Request

FAO: GSNI – Minerals
Our Ref: M01616-23

Hi Mark,

McCloy Consulting have been appointed to undertake a water and geology assessment for a proposed wind farm development west of Glenarm, Co. Antrim. The site centroid is **IG: 325541, 414833** – shown below.

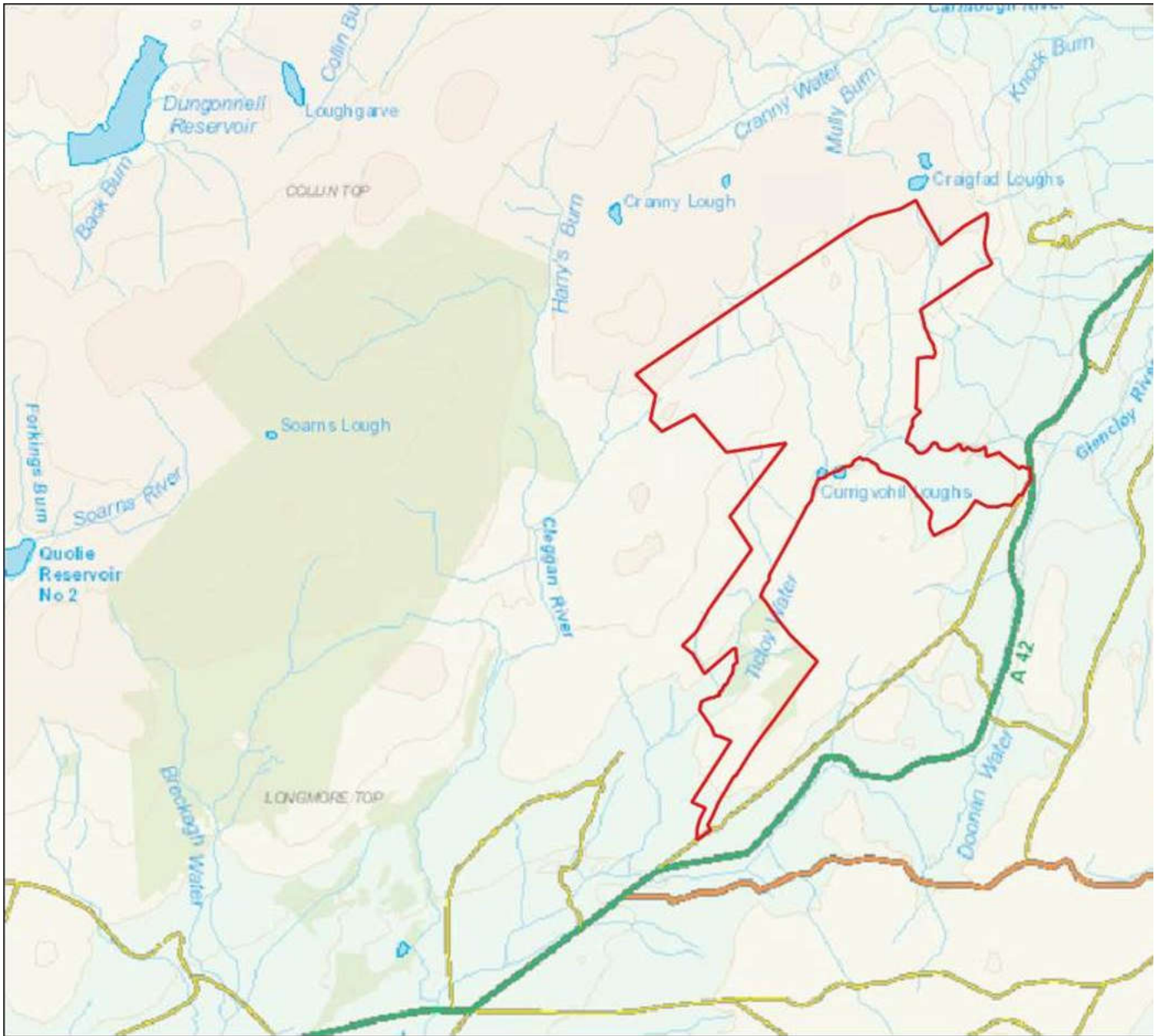
As part of the scoping exercise for this assessment we have undertaken a review of the information available of the GSNI GeoIndex which indicates that the proposed site is in proximity to a Mineral Prospecting Licence area ref: LON3/14 (Lonmin NI) and an Historic Licence Area ref: AR 5/85.

We would be grateful if you could provide the following information:

- Specific details of the licences in relation to the location plan below (any exploration within the red line boundary)
- Potential for constraints to the proposed development as a result of licences

Additionally, a review of the GeoIndex indicates there are shafts and adits in the vicinity of the site. Is it possible to provide further information on the shafts and adits, or others in the area which may not be shown on the GeoIndex mapping? Can GSNI advise if the presence of the shafts and adits would pose any constraints to development?

If you require further information please let me know. Thanks in advance for your time.



Best regards
Iain

Iain Muir

Project Consultant | Belfast



E: Iain.Muir@mccloyconsulting.com | T: +44 (0) 28 9084 8694 | W: www.mccloyconsulting.com
Mossley Mill, Lower Ground (West), Carnmoney Road North, Newtownabbey BT36 5QA

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Iain Muir

From: Sam Mills <Sam.Mills@midandeastantrim.gov.uk>
Sent: 04 May 2021 13:04
To: Iain Muir
Subject: 2021.04.30 - EIR2021645692- Environmental Information Return - Carnlough Wind Farm - Iain Muir - McCloy Consulting
Attachments: 2021.04.30 - EIR2021645692- Environmental Information Return - Carnlough Wind Farm - Iain Muir - McCloy Consulting.pdf

Iain

Please find attached Environmental Information Return for your Enquiry Site West of Glenarm. Should you wish to discuss this return further, then please do not hesitate to contact me.

Regards

Sam Mills
Environmental Health Officer
Mid & East Antrim Borough Council

T: 0300 1245 000
DD: 028 25 633 136
E: sam.mills@midandeastantrim.gov.uk
W: www.midandeastantrim.gov.uk



Ardeevin
80 Galgorm Road
Ballymena
BT42 1AB

Work Pattern - Tuesday, Wednesday and Thursday

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Your Ref: M01616-23
Env Ref: EIR/2021/645692
Being dealt with by: Mr Sam Mills Tel: - 0300 1245 000
sam.mills@midandeastantrim.gov.uk

Date: 30th April 2021

Iain Muir
McCloy Consulting

By Email

Re:- Request for Environmental Information
Site:- Proposed Wind Farm development site, West of Glenarm

Please find information requested by you with regard to the above site in relation to private water supplies within 3km.

This information in this response is provided in good faith based on your enquiry and on a 'without prejudice' basis.

A search radius of 3000m has been carried out centred on the grid co-ordinates 325541, 414833.

Please reply to:

Head Office
The Braid
1-29 Bridge Street
Ballymena BT43 5EJ

Ballymena Office
Ardeevin
80 Galgorm Road
Ballymena BT42 1AB

Carrickfergus Office
Museum & Civic Centre
11 Antrim Street
Carrickfergus BT38 7DG

Larne Office
Smiley Buildings
Victoria Road
Larne BT40 1RU

Tel: 0300 1245 000
www.midandeastantrim.gov.uk

Chief Executive: Anne Donaghy



1. Private Water Supplies

Private Water Supplies located within the enquiry area:

Reference Number	MA002Q
Name	
Supply Address	35 Whitehall Road, Carnlough
Nature of Premises	Residential
Owner	
Classification	3.5
Disinfection	
Filtration	
Mains	
Population Served	7
Purpose	
Seasonal	No
Source	Spring
X Coordinate	327480
Y Coordinate	417902



Mid & East Antrim Borough Council
Tel: 0300 1245 000

www.midandeantrim.gov.uk

Additional information may be sought from Drinking Water Inspectorate for Northern Ireland
(within Department of Agriculture, Environment and Rural Affairs)

This information in this response is provided in good faith based on your enquiry and on a
'without prejudice' basis.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Sam Mills', with a horizontal line underneath.

Sam Mills
Environmental Health Officer



Iain Muir

From: DAERA NIEA Water Info <WaterInfo@daera-ni.gov.uk>
Sent: 02 April 2021 11:03
To: Iain Muir
Subject: WQU1065reply M01616-23 Proposed Development Information Request
Attachments: NIEA - WMU - WQU1065 - Groundwater Quality - Response - returns.docx; NIEA - WMU - WQU1065 - Groundwater Quality - Data..xlsx; NIEA - WMU - WQU1065 Data Analysis Response.xlsx

Dear Iain Muir,

Please see attached responses to your recent enquiry.

If you require any further water related environmental information about this or any other site please e-mail details of your information request to WaterInfo@daera-ni.gov.uk

Many thanks,

**Data Analysis and Management Team
Water Management Unit**



From: Iain Muir [<mailto:Iain.Muir@mccloyconsulting.com>]
Sent: 15 March 2021 11:54
To: DAERA NIEA Water Info <WaterInfo@daera-ni.gov.uk>
Subject: M01616-23 Proposed Development Information Request

**FAO: NIEA WMU
Our Ref: M01616-23**

Dear Sir / Madam,

McCloy Consulting have been appointed to undertake a water and geology assessment for a proposed wind farm development west of Glenarm, Co. Antrim. The site centroid is **IG: 325541, 414833** – shown below.

We have used the online viewer to ascertain the following;

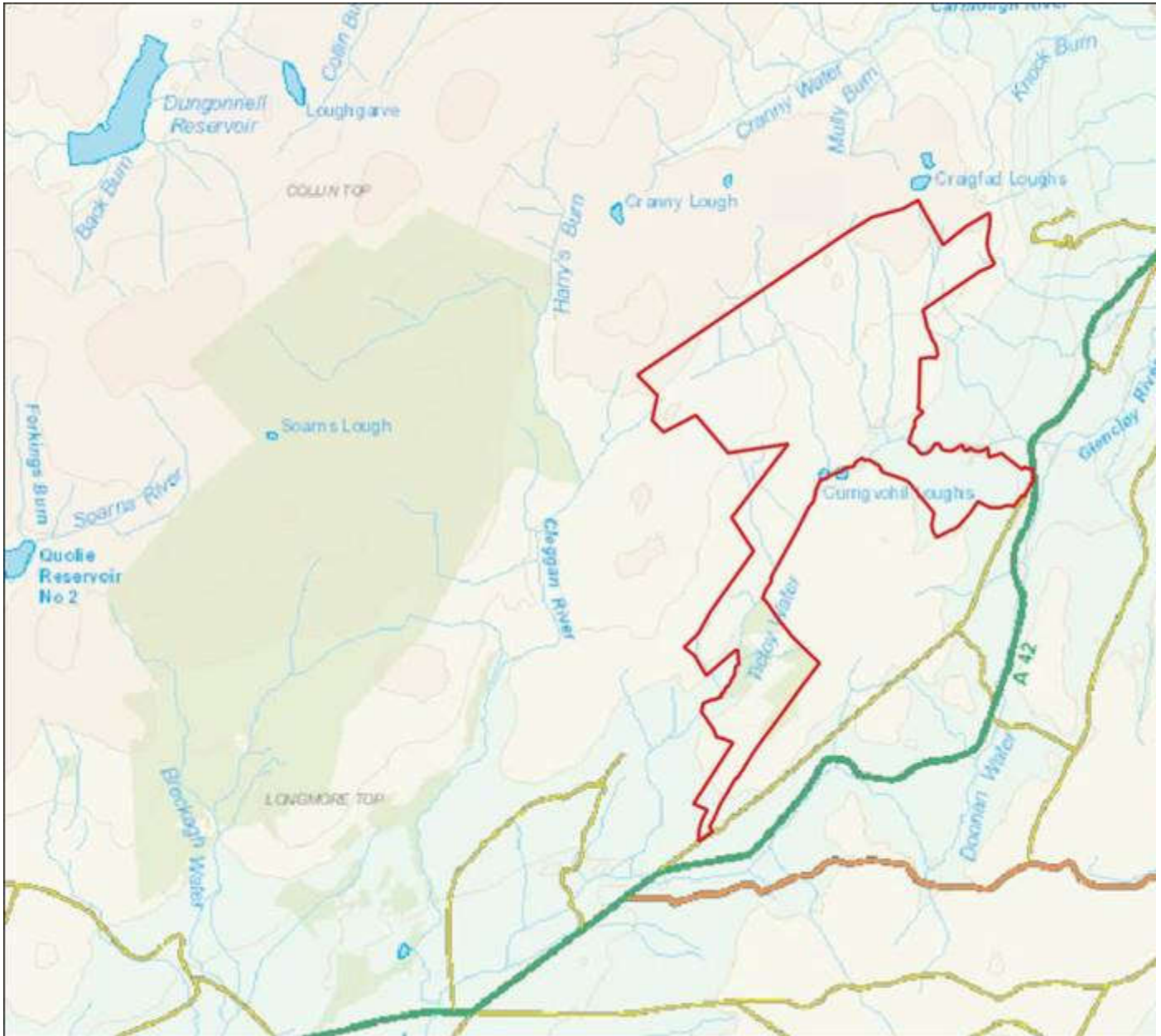
- Surface water and groundwater abstractions within 5km of the site;
- Surface water monitoring station locations.

We could be grateful if WMU could provide if available;

- Surface water quality / chemistry data (from 2009 onwards including latest 2018 data) within a 5 km radius of the site;
- Associated groundwater quality data (Site Id - GBNIGWNE02-C; Site Code – 20132)
- Details of the pollution incidents recorded in the downstream catchment of the development site;

- Details of any Groundwater Authorisation Sites, Abstraction Licences and / or Industrial Consents in proximity to the proposed development site;
- Provide details of watercourse fishery designations in the vicinity of the site (i.e. salmonid/cyprinid);
- Advise if the surface and groundwater abstractions are the most up to date datasets and provide details of other abstractions if not shown on the viewer;
- Advise any further considerations that are deemed appropriate for a hydrological / hydrogeological assessment at the site from your perspective.

If you require further information please let me know. Thanks in advance for your time.



Best regards
Iain

Iain Muir

Project Consultant | Belfast



E: Iain.Muir@mccloyconsulting.com | T: +44 (0) 28 9084 8694 | W: www.mccloyconsulting.com
Mossley Mill, Lower Ground (West), Carnmoney Road North, Newtownabbey BT36 5QA

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NIEA – WMU – WQU1065 – Groundwater Quality – Response

A search of the Groundwater Monitoring Database has found that there were 2 groundwater monitoring points within the requested 5 km radius search area.

The groundwater quality data are attached: **NIEA - WMU – WQU1065 - Groundwater Quality - Data.**

Land and Groundwater Team

RiverID	LMA	River waterbody name	Monitoring	WFD2018 Invert River Waterbody Class	Macrophyte River Waterbody Class	Fish River Waterbody Class	Diatoms River Waterbody Class	Final Biology River Waterbody Class	DO% Sat River Waterbody Class	SRP River Waterbody Class	pH River Waterbody Class	Physico-chem River Waterbody Class	Total Ammonia River Waterbody Class	Other Specific Pollutants River Waterbody Class	Final Specific Pollutant River Waterbody Class	Morphology Class WFD2018	Hydrology class WFD2018	Hydromorphology Class WFD2018	Ecological Status WFD2018	Priority Substances (Chemical status) River waterbody Class WFD2018	Final Status 18
GN1INB030308214	Braid and Main	Braid River (Aghacully)	F10189	GOOD OR BETTER	HIGH	NO DATA	GOOD	GOOD	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	NO DATA	HIGH	HIGH	GOOD	HIGH	GOOD
GN1INB030302016	Braid and Main	Priests Burn	F10188	HIGH	GOOD	HIGH	GOOD	GOOD	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	GOOD	HIGH	GOOD	GOOD	HIGH	GOOD
GN1INB030302022	Braid and Main	Artoges River	F10187	GOOD OR BETTER	GOOD	NO DATA	GOOD	GOOD	HIGH	GOOD	HIGH	GOOD	HIGH	HIGH	HIGH	MODERATE	<GOOD	GOOD	GOOD	HIGH	GOOD
GN1INB030302233	Braid and Main	Glenavel Water	F10193	GOOD OR BETTER	GOOD	NO DATA	HIGH	GOOD	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	POOR	GOOD	MODERATE	GOOD	HIGH	MEP
GN1INB040403012	Glens and Rathlin	Glenarm River	F10479	GOOD OR BETTER	HIGH	NO DATA	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	MODERATE	HIGH	MODERATE	GOOD	HIGH	GOOD
GN1INB040403060	Glens and Rathlin	Camblough River	F10463	GOOD OR BETTER	GOOD	NO DATA	GOOD	GOOD	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	NO DATA	HIGH	HIGH	GOOD	HIGH	GOOD
GN1INB040403061	Glens and Rathlin	Glendoy River	F10478	GOOD OR BETTER	HIGH	NO DATA	GOOD	GOOD	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	NO DATA	HIGH	HIGH	GOOD	HIGH	GOOD
GN1INB040403064	Glens and Rathlin	Inver River	F10477	GOOD OR BETTER	HIGH	NO DATA	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	MODERATE	<GOOD	MODERATE	GOOD	HIGH	MEP