



Water Quality Monitoring Programme

Clachaig Glen Wind Farm

PREPARED FOR
RWE Renewables UK Onshore
Wind Limited

DATE
October 2025

REFERENCE
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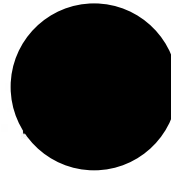
Water Quality Monitoring Programme

Clachaig Glen Wind Farm
0738302



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CONTENTS

1.	INTRODUCTION	1
2.	SAMPLING METHODOLOGY	3
2.1.1	Manual Spot Samples	3
2.1.2	In-Situ Monitoring	4
2.1.3	Visual Inspection	4
2.2	MONITORING FREQUENCY	4
2.3	ESTABLISHING BASELINE CONDITIONS	5
3.	MONITORING LOCATIONS	6
3.1	HYDROLOGICAL CONTEXT	6
3.2	MONITORING POINTS	6
3.2.1	Initial Locations	6
3.2.2	Revised Locations	6
4.	EMERGENCY ACTION PLAN	10
5.	REPORTING	11
5.1	BASLINE MONITORING REPORT	11
5.2	CONSTRUCTION AND OPERATIONAL REPORTS	11
5.3	FINAL MONITORING REPORT	11
6.	SUMMARY	13

APPENDIX A CONSULTATION

APPENDIX B FIGURE 1

LIST OF TABLES

TABLE 1: WATER QUALITY MONITORING FREQUENCY	5
TABLE 2: WATER QUALITY MONITORING LOCATIONS	8

LIST OF FIGURES

Figure 1: Water Quality Monitoring Locations and Surface Water Sub-Catchments

ACRONYMS AND ABBREVIATIONS

Acronym	Description
ALK	Alkalinity
ANC	Acid Neutralising Capacity
BP	Borrow Pit
DO	Dissolved Oxygen
DOC	Dissolved Organic Carbon
ERM	Environmental Resources Management
NTU	Turbidity
SEPA	Scottish Environment Protection Agency
T	Turbine
UKAS	United Kingdom Accredited Service
WQMS	Water Quality Method Statement
WQMP	Water Quality Monitoring Programme

1. INTRODUCTION

Environmental Resources Management Ltd (ERM) has been commissioned by RWE Renewables UK Onshore Wind Limited (RWE) to undertake baseline phase water quality monitoring for Clachaig Glen Wind Farm ('the Development'). The Development has been consented but is not yet under construction and is located approximately 20 km north of Campbeltown, 3.7 km southeast of Tayinloan, and approximately 1.8 km northeast of Muasdale on the western coast of the Kintyre Peninsula, Argyll and Bute ('the Site'). It is within the Argyll & Bute Council planning authority area.

The aim of water quality monitoring is to provide a robust baseline water quality dataset for the Site prior to construction, and ongoing monitoring during the construction and post-construction phases to ensure there is no deterioration in water quality as a result of the Development.

This Water Quality Monitoring Programme (WQMP) has been developed to set out the approach to water quality monitoring and water quality monitoring that will be carried out in line with this WQMP.

It has been informed by:

- Scottish Government 'Monitoring watercourses in relation to onshore wind farm developments'¹; and
- NatureScot 'Good practice during wind farm construction'².

A Water Quality Method Statement (WQMS) was sent to SEPA, Argyll and Bute Council, and the Marine Directorate to confirm the approach to be taken. SEPA and Argyll and Bute Council had no comments, deferring to the Marine Directorate. The comments from the Marine Directorate have been addressed in this document and are attached in Appendix A.

In addition, following the first round of monitoring changes have been made to the monitoring locations first issued to the Marine Directorate in the WQMS. The revised list of monitoring locations are set out in this WQMP.

This document also addresses Planning Condition 35 of the consent under Section 36 of the Electricity Act 1989 for the Development (ECU reference no: ECU00002103; Argyll & Bute Council reference no: 22/00613/S36) which reads:

(1) No later than 12 months prior to the Commencement of development, a Water Quality Monitoring Programme ("WQMP") shall be submitted by the Company to the Planning Authority for its written approval in consultation with Marine Directorate.

(2) The WQMP shall consist of hydrochemistry (the chemical characteristics of waterbodies) and physical data (including temperature, dissolved oxygen concentration, biological oxygen demand, turbidity, DOC, pH, alkalinity, ANC, aluminium, nitrate, nitrite, phosphate, and flow data) collected:

¹ Scottish Government (2021). Monitoring watercourses in relation to onshore wind farm developments: generic monitoring programme. Available at: [Monitoring watercourses in relation to onshore wind farm developments: generic monitoring programme - gov.scot](https://www.gov.scot/publications/monitoring-watercourses-in-relation-to-onshore-wind-farm-developments-generic-monitoring-programme/pages/1-1.aspx).

² NatureScot (2024). Good practice during wind farm construction. Available at: [Good practice during wind farm construction | NatureScot](https://www.naturescot.gov.uk/good-practice-during-wind-farm-construction).

(a) on a monthly basis for a minimum of 12 months pre-construction (to establish the baseline);

(b) during construction;

(c) for at least one-year post-construction (civil works installation), with the length of post-construction monitoring dependent on the monitoring results during the construction phase; and

(d) shall detail the timetabling of additional monitoring where an impact or change has been detected.

(3) In accordance with the approved WQMP, sampling shall take place at sites with a potential to be impacted by the Development or its construction and at control sites. The sites to be surveyed should include but not be limited to existing crossing points and those to be constructed or upgraded.

(4) The WQMP shall provide for both raw and interpreted written results of the sampling to be submitted to the Planning Authority and Marine Directorate on a quarterly basis from the first sample collected.

(5) Any updates or amendments made to the WQMP must be submitted, for the written approval of the Planning Authority.

(6) The approved WQMP and any approved updates or amendments to the approved WQMP shall be implemented in full.

Reason: *To ensure no deterioration of water quality, as stipulated by The Water Framework Directive (overall chemical status does not decrease as result of the Development), and to protect fish populations within and downstream of the development area.*

2. SAMPLING METHODOLOGY

2.1.1 MANUAL SPOT SAMPLES

2.1.1.1 METHOD

Manual spot samples will be taken at the monitoring location set out in Section 3 of this WQMP and will be sent to an appropriately qualified laboratory (e.g. a United Kingdom Accredited Service (UKAS) accredited organisation) for analysis.

Water samples from watercourses will be collected using the appropriate bottle types and volumes as provided by the laboratory.

Samples will either be collected directly in the bottles from the watercourse where it is safe to approach; or will be collected using a sampling pole with a beaker on the end with water transferred to the bottle where it is not safe to directly approach the watercourse. The beaker and sampling pole will be rinsed or exchanged for a new beaker at the different sampling locations. Nitrile gloves will also be used to ensure no cross contamination between sampling locations.

The samples will be labelled with the sample reference, date, and time of collection, and a photo taken. Samples will be stored in a suitable temperature-controlled container (cool box) whilst being transported to the laboratory. The samples will be delivered to the laboratory depot within 48 hours of collection. A chain of custody form will be completed and signed by field staff and the laboratory to confirm the date, time and number of samples that have been delivered. One copy will be kept by the surveyor and one by the laboratory.

2.1.1.2 QUALITY ASSURANCE

A duplicate sample will be taken at one monitoring location during each round of monitoring as a control sample. This will be used to identify any errors in sample collection, transport, or laboratory inaccuracy.

2.1.1.3 MONITORING PARAMETERS

In line with Scottish Government guidance¹, the following water quality parameters will be analysed at the UKAS laboratory:

- Turbidity (NTU);
- Dissolved organic carbon (DOC);
- pH;
- Alkalinity (ALK);
- Acid neutralising capacity (ANC);
- Aluminium;
- Total oxidised nitrogen (nitrate and nitrite);
- Phosphate;
- Dissolved oxygen concentration (DO); and
- Biological oxygen demand.

2.1.2 IN-SITU MONITORING

In-situ monitoring will be carried out using a suitable hand-held monitor (sonde) and turbidity meter, the specific make / model of which will be determined at the time of sampling. The equipment will be calibrated before commencing field work each month.

The sampling will be carried out as follows:

- The sonde / turbidity meter will be placed into the watercourse without disturbing the riverbed and held in place until the readings have stabilised.
- The reading will be recorded on paper and / or digital data form with time stamps and GPS coordinates, and a photo captured.
- The equipment will be rinsed between sampling points and nitrile gloves will be worn to ensure no cross contamination between sampling locations.

2.1.2.1 MONITORING PARAMETERS

The parameters monitored during the in-situ monitoring will be:

- Stream height;
- Turbidity;
- pH;
- DO;
- Electrical Conductivity;
- Temperature;
- Salinity; and
- Total Dissolved Solids (TDS).

2.1.3 VISUAL INSPECTION

Surveyors will also take note of the following watercourse characteristics while on-Site:

- Flow captured as observed flows (i.e., high, moderate, low, no flow);
- Colour;
- Opacity;
- Sheen;
- Presence of debris;
- Visual signs of erosion; and
- Upstream activities.

The Ecological Clerk of Works (ECoW) will also be responsible for daily visual inspections during the construction phase of the Development.

2.2 MONITORING FREQUENCY

Water quality monitoring will be carried out during each phase of the Development: pre-construction, construction, and post-construction. The frequency of sampling is set out in **Table 1**.

Table 1: Water Quality Monitoring Frequency	Duration	Monitoring Frequency
Pre-Construction (Baseline)	12 months	Monthly
Construction	12-18* months	Monthly
Post-Construction (Operational)	12 months	Monthly

*Exact duration to be confirmed once construction timeline is finalised

2.3 ESTABLISHING BASELINE CONDITIONS

The 12 months pre-construction monitoring will be used to establish the baseline (existing conditions) of watercourses on-Site. During the construction and operational phases, the same water quality parameters will be monitored using the same methodology as during the baseline monitoring so a direct comparison can be made.

The water quality parameters measured during the construction and operational period will be compared to the baseline conditions gathered in the pre-construction monitoring, the previous month's results, and the Water Framework Directive Environmental Standards³. The results of the baseline monitoring and Water Framework Directive Standards will be used to set maximum threshold values which, if exceeded, will indicate impacts to watercourses and highlight that further mitigation measures are needed.

³ Scottish Government (2014) Environmental Protection: The Scotland River Basin District (Standards) Directions 2014. Available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/regulation-directive-order/2014/08/scotland-river-basin-district-standards-directions-2014/documents/00457867-pdf/00457867-pdf/govscot%3Adocument/00457867.pdf>.

3. MONITORING LOCATIONS

3.1 HYDROLOGICAL CONTEXT

The Clachaig Water runs through the centre of the Site with a number of smaller tributary watercourses feeding into it throughout the Site. Therefore, the overall Development sits within the Clachaig Water hydrological catchment, but elements of the Development are located within sub-catchments associated with the various tributary watercourses. The hydrological catchments were derived using the ArcHydro toolbox within ArcGIS Pro and indicate there are two primary sub-catchments, one covering the east of the Site and one covering the west. The sub-catchments are shown in **Figure 1** under Appendix B.

3.2 MONITORING POINTS

The proposed water quality monitoring locations have been based on the main sub-catchments within the Site and are located at their downstream point so that water quality impacts from different aspects of the Development can be determined. The points are numbered WQ1, WQ2 etc and are shown on **Figure 1**.

3.2.1 INITIAL LOCATIONS

A total of seven surface water quality monitoring points were originally proposed in the WQMS and the rationale for selecting each location was provided in Table 1 of the WQMS.

Two control points upstream of the Development were selected to provide monitoring points within the two main sub-catchments (east and west) of the Clachaig Water. These points will have the same climatic conditions and land use as the other sample locations but are upstream of the Development and therefore the catchments contain no Development infrastructure. The control points will be used to identify natural variances in water quality independent to the Development.

A final monitoring point (WQ7) was located approximately 1 km downstream of the final monitoring point. Its purpose is to determine if water quality impacts are detectable more than 1 km from the Development. The WQMS also set out that sample locations may be micro-sited during the first round of baseline surveys depending on watercourse access / site conditions, but where possible will remain within 10 m of the proposed locations. Subsequently the same monitoring locations will be used throughout the remainder of the monitoring period. However, should ground conditions, water levels, or any other relevant health and safety related issues prevent safe access to monitoring points, no sample will be collected.

3.2.2 REVISED LOCATIONS

Since submission of the WQMS, the first round of surveying has been completed. This has led to refinement of the monitoring locations based on the on-Site hydrology, ground conditions, access restrictions, and further desk-top analysis of the catchments. The revised list of monitoring locations and the reason for their inclusion or exclusion are set out in **Table 2** below. A total of six locations will be monitored.

As per the WQMS, the monitoring locations may still be micro-sited during the baseline surveys depending on watercourse access / site conditions throughout the year, but where possible will remain within 10 m of the proposed locations. Additionally, should ground

conditions, water levels, or any other relevant health and safety related issues prevent safe access to monitoring points, no sample will be collected.

TABLE 2: WATER QUALITY MONITORING LOCATIONS

Monitoring Location	Grid Reference		Rationale
	Easting	Northing	
Control 1	173915	643480	Located in the northeastern corner of the Site ('Control 1' catchment) in the eastern sub-catchment along the headwaters of the Clachaig Water. It is upstream of the Development. This survey point has been moved north-east and upstream from the original location set out in the WQMS. Further desktop analysis identified there is potential for impacts from the Development at the downstream location, so this move has brought it further upstream within the western sub-catchment where it will be a valid control point.
WQ1	171894	641631	Located on the Clachaig Water in the east of the Site, within 'Sub-catchment 1' but upstream of the WQ2 tributary. It is downstream of: • Turbines (T) 2, 5, 7 and 6; • Borrow Pits (BP) 1, 2, 3 and 4; • the Substation; • the Construction Compound; and • various new and existing access tracks which are also associated with new watercourse crossings.
WQ2	171872	641595	Located at the downstream end of a tributary of the Clachaig Water in the east of the Site within 'Sub-catchment 2'. It is downstream of the following: • T13 and; • its associated new access track including watercourse crossing.
WQ3	170760	641530	Located on the Clachaig Water at the downstream end of the eastern sub-catchment forming 'Sub-catchment 3'. It is located upstream of where the western sub-catchment ('Sub-catchment 5') and 'Sub-Catchment 4' discharges into the Clachaig Water. The monitoring point is downstream of the following: • T2, T5, T7, T6, T13, T11 and T13; • The hardstanding for T10; • BP1, BP2, BP3, BP4 and BP5; • blade laydown area 2; and • new and existing access tracks including watercourse crossings.
WQ4 EXCLUDED	170710	641511	Located on a tributary of the Clachaig Water in the southeast of the Site ('Sub-catchment 4'), downstream of the following: • T14; and • new access tracks. Following the first round of survey it was discovered this watercourse does not exist on the ground. Impacts from T14 will instead be captured by WQ6.
Control 2 EXCLUDED	172090	643130	Located in the northwestern corner of the Site ('Control 2 catchment') in the western sub-

Monitoring Location	Grid Reference		Rationale
	Easting	Northing	
			catchment along the headwaters of the Clachaig Water. It is upstream of the Development. Following the first round of monitoring it was noted this monitoring point will be downstream of the access track to the Development. Therefore, it is not suitable as a control point as there is potential for impacts to water quality from the track. WQ5 will instead capture potential impacts in the western sub-catchment, and Control 1 is considered a suitable control point for the Clachaig Water catchment as a whole and representative of both the eastern and western sub-catchments.
WQ5	170707	641538	Located on a tributary of Clachaig Water at the downstream end of the western sub-catchment, 'Sub-catchment 5' covers the west of the Site. It is downstream of the following: • T1, T3, T4, T8, T10; • BP6; and • new access tracks. This control point has been moved approximately 30 m downstream following the first round of monitoring.
WQ6	170517	641405	Located on the Clachaig Water downstream of and encompassing the whole Development. This point has been moved further south following the first round of monitoring to account for WQ4 not now being included.
WQ7 EXCLUDED	169673	640855	Located on the Clachaig Water approximately 1 km downstream of the whole Development. This point has been selected to provide a comparison with WQ6 to understand how far downstream water quality impacts may be detectable. Following the first round of survey and further land access discussions, it has been determined this location is inaccessible and has therefore been removed as a monitoring point. Location WQ6 will capture the downstream impacts of the Development as a whole. The need to monitor the downstream transmission effects is not considered necessary as if water quality issues are detected at WQ6 remediation actions will be put in place.

4. EMERGENCY ACTION PLAN

The following incidents will trigger an emergency response during the construction period:

- Visual inspections carried out by the ECoW indicate significant changes in the colour (dissolved load) or turbidity (suspended load) of any watercourses, including the presence of oil sheen from, for example, construction plant;
- Concerns regarding watercourses raised by stakeholders that are subsequently investigated and validated by the ECoW;
- There is an environmental incident on-Site, for example a known spill of chemical substances, or the failure of a sediment dam resulting in high sediment input to watercourses etc; and / or
- Results from the routine water quality sampling show parameter concentrations above the relevant assessment criteria.

Should any of the above occur all construction activity will be stopped within the affected catchment. Ideally, emergency water quality monitoring will be carried out within 24 hours of a reported incident, the Marine Directorate and SEPA will be immediately informed (it may also be appropriate to inform other consultees such as Argyll and Bute Council), and mitigation measures will be implemented to ensure that no further effects can occur.

A programme of emergency water quality monitoring will be instigated, which will continue whilst the remedial mitigation measures are put in place. The duration of emergency monitoring will be determined based on the severity of the incident(s) and following consultation with RWE, the ECoW, the Marine Directorate, and SEPA. The aim of the remedial actions will be to restore baseline conditions as quickly as possible.

5. REPORTING

The monitoring reports below will be delivered to the appropriate statutory consultees as required (anticipated to include Marine Directorate and Argyll and Bute Council).

5.1 BASELINE MONITORING REPORT

A baseline summary report will be drafted following completion of the 12 months pre-construction water quality monitoring. It will determine the baseline maximum threshold values based on the results of the pre-construction monitoring. The construction and operational phase monitoring results will be compared against the baseline results. The report will be sent to SEPA and Argyll and Bute Council.

The report will include the following:

- Date, time, and location of the sampling;
- Methodology;
- A map, GPS location, and photograph of each sampling location;
- A log of visual observations for each monitoring point (parameters set out in Section 2.1.3 of this WQMP);
- Summary of laboratory results; and
- The maximum threshold values to be compared to the construction and operational phase monitoring.

5.2 CONSTRUCTION AND OPERATIONAL REPORTS

Reports will be submitted to SEPA and Argyll and Bute Council on a monthly basis during the construction and operational phases of Development. Reports will include the following information:

- Date, time, and location of the sampling;
- Methodology;
- A map, GPS location, and photograph of each sampling location;
- A log of visual observations for each monitoring point (parameters set out in Section 2.1.3 of this WQMP);
- Summary of laboratory results;
- A comparison of current water quality against the baseline conditions;
- Identify any exceedances; and
- Any actions needing to be taken.

5.3 FINAL MONITORING REPORT

Upon completion of the post-construction monitoring, a final summary water quality monitoring report will be produced and sent to RWE. The final report will summarise the overall changes and / or impacts to water quality (where relevant) as a result of the Development.

The report will include the following:

- A summary of all sampling including date, time, and locations;

- Overview of the sampling methodology;
- A map, GPS location, and photograph of each sampling location;
- Any visual observations that indicated impacts to water quality;
- Summary of all laboratory results;
- Any incidents of water quality exceedances during construction and operation;
- Any actions that were taken during the construction and operational phases to mitigate against impacts; and
- The overall conclusions of the water quality monitoring.

6. SUMMARY

This Water Quality Management Programme details the methodology for water quality monitoring for the Clachaig Glen Wind Farm. It lays out the type of monitoring that will be conducted during the pre-construction, construction, and operational phases; the proposed monitoring locations; the reporting which will be delivered throughout the monitoring period; and emergency response procedures.

The aim of water quality monitoring is to ensure there is no deterioration in water quality as a result of the Development.

This WQMP has been finalised following consultation with the Marine Directorate, and following the first round of monitoring. Water quality monitoring will be carried out in line with this WQMP.

The production of a WQMP addresses Planning Condition 35 of the consent under Section 36 of the Electricity Act 1989 for the Development.

APPENDIX A CONSULTATION

Jessica Cooke

From: Jack.Wilkinson@gov.scot on behalf of MD-SEDD-RE_Advice@gov.scot
Sent: 30 October 2025 14:24
To: Briony McIntosh; Ryo Kikuchi
Cc: Michael Maclean; Reagan Duff; arlene.knox@argyll-bute.gov.uk; Jessica Cooke; MD-SEDD-RE_Advice@gov.scot
Subject: RE: Clachaig Glen Wind Farm - Water Quality Monitoring

EXTERNAL MESSAGE

Hi Briony,

Our advisor is on leave and returns on Monday. I will pass this on to them to get a response to you soon.

Kind regards,
Jack

Jack Wilkinson (he/him)

Renewables Science Advice & Projects Co-ordinator
Marine Renewables and Ecology
Marine Directorate



From: Briony McIntosh <briony.mcintosh@erm.com>
Sent: 30 October 2025 12:12
To: MD-SEDD-RE Advice <MD-SEDD-RE_Advice@gov.scot>; Ryo Kikuchi <ryo.kikuchi@erm.com>
Cc: Michael Maclean <michael.maclean@erm.com>; Reagan Duff <reagan.duff@erm.com>; arlene.knox@argyll-bute.gov.uk; Jessica Cooke <jessica.cooke@erm.com>
Subject: RE: Clachaig Glen Wind Farm - Water Quality Monitoring

Hi Jack,

Thanks for your feedback. The site is not located near any SEPA gauging sites, and due to the location and nature of the site there are no stage boards. Therefore, per our original consultation we propose that flow rates will be captured as observed flows (i.e., high, moderate, low, no flow). We will update our water quality monitoring plan inline with this. Please could the MD-SEDD provide any feedback on this approach.

Kind regards

From: Jack.Wilkinson@gov.scot <Jack.Wilkinson@gov.scot> **On Behalf Of** MD-SEDD-RE_Advice@gov.scot

Sent: Thursday, October 30, 2025 12:02 PM

To: Ryo Kikuchi <ryo.kikuchi@erm.com>

Cc: Briony McIntosh <briony.mcintosh@erm.com>; Michael Maclean <michael.maclean@erm.com>; Reagan Duff <reagan.duff@erm.com>; arlene.knox@argyll-bute.gov.uk; Jessica Cooke <jessica.cooke@erm.com>; MD-SEDD-RE_Advice@gov.scot

Subject: RE: Clachaig Glen Wind Farm - Water Quality Monitoring

EXTERNAL MESSAGE

Hi Ryo,

We provided a response to your request below on the 24/10/2025 to the local authority. It is their responsibility to pass on information from MD-SEDD advisors onto the consultancy. However, in this instance, for ease I will share the response from our advisor with you now, outlined below in italics:

MD-SEDD received a response from the applicant regarding the WQMP and the proposed measurement of flow rates. MD-SEDD advise that spot measurements of stream height should be obtained from stage boards installed in watercourses. Flow rates of the watercourses can be calculated using data collected from a nearby SEPA monitored gauging site.

Kind regards,
Jack

Jack Wilkinson (he/him)

Renewables Science Advice & Projects Co-ordinator
Marine Renewables and Ecology
Marine Directorate



From: Ryo Kikuchi <ryo.kikuchi@erm.com>

Sent: 29 October 2025 17:28

To: MD-SEDD-RE Advice <md-sedd-re_advice@gov.scot>

Cc: Briony McIntosh <briony.mcintosh@erm.com>; Michael Maclean <michael.maclean@erm.com>; Reagan Duff <reagan.duff@erm.com>; Knox, Arlene <arlene.knox@argyll-bute.gov.uk>; Jessica Cooke <jessica.cooke@erm.com>

Subject: RE: Clachaig Glen Wind Farm - Water Quality Monitoring

Hello,

I just wanted to follow up on my earlier email below, regarding our proposed approach to recording flow rates for Clachaig Glen Wind Farm?

Kind regards,
Ryo



Ryo Kikuchi MRTPI
Senior Consultant

York
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From: Ryo Kikuchi
Sent: Wednesday, October 22, 2025 2:27 PM
To: 'MD-SEDD-RE_Advice@gov.scot' <MD-SEDD-RE_Advice@gov.scot>
Cc: Briony McIntosh <briony.mcintosh@erm.com>; Michael Maclean <michael.maclean@erm.com>; Reagan Duff <reagan.duff@erm.com>; Knox, Arlene <arlene.knox@argyll-bute.gov.uk>; Jessica Cooke <jessica.cooke@erm.com>
Subject: Clachaig Glen Wind Farm - Water Quality Monitoring

Good afternoon,

I am getting in touch regarding the water quality monitoring programme currently being planned for Clachaig Glen Wind Farm. Please find attached the recent Marine Directorate response regarding the proposed scope of the monitoring.

Regarding the approach for obtaining flow rates, based on previous projects of a similar nature it is proposed that the flow rates would be captured as observed flows (i.e., high, moderate, low, no flow) rather than capturing flow velocities with a handheld device and then converting those values to a flow rate. The rationale behind this is that in channel flows will vary based on season and previous rainfall, and therefore numerical flow values would not be utilised to set any impact thresholds. Therefore the flow value is considered to be descriptive and observed flow descriptions are proportionate. Additionally, to collect numerical flow values surveyors are required to enter watercourses and following periods of heavy rainfall entering the channel might be deemed unsafe and as a result there could be data gaps.

Please could you confirm if the Marine Directorate agree that this approach is acceptable?

Kind regards,
Ryo



Ryo Kikuchi MRTPI
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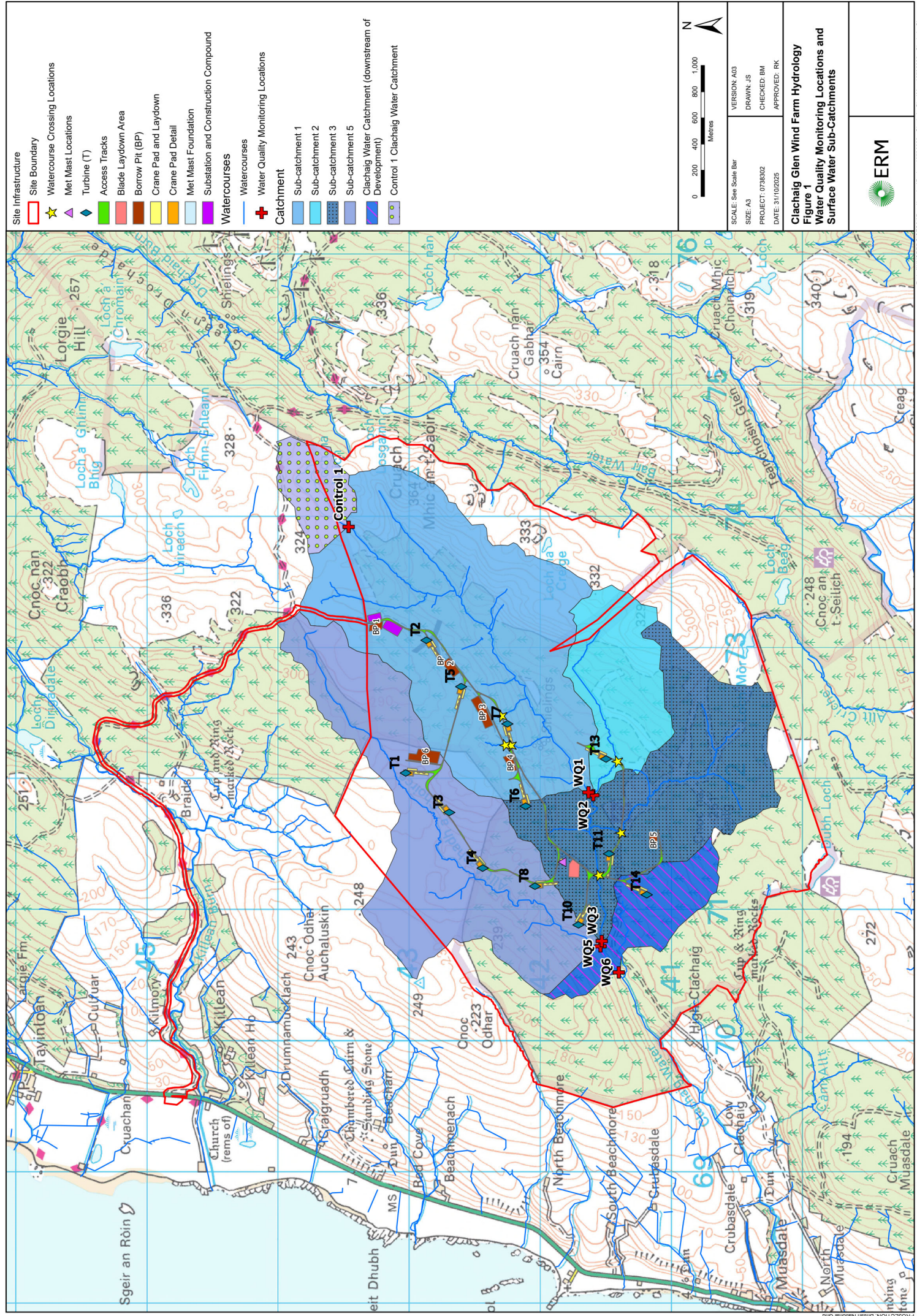
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APPENDIX B

FIGURE 1





ERM HAS OVER 140 OFFICES ACROSS THE FOLLOWING
COUNTRIES AND TERRITORIES WORLDWIDE

Argentina	Mozambique
Australia	Netherlands
Belgium	New Zealand
Brazil	Panama
Canada	Peru
China	Poland
Colombia	Portugal
Denmark	Romania
France	Singapore
Germany	South Africa
Hong Kong	South Korea
India	Spain
Indonesia	Switzerland
Ireland	Taiwan
Italy	Thailand
Japan	UAE
Kazakhstan	UK
Kenya	US
Malaysia	Vietnam
Mexico	

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