Annex 11.2L: Rarely Recorded Species Information

MachairWind Offshore Ornithology

ScottishPower Renewables (SPR)

320 St Vincent St Glasgow G2 5AD

Prepared by:

SLR Consulting Limited

St. Vincent Place, Glasgow, G1 2EU

SLR Project No.: 413.058018.00001

Client Reference No: MCW-DWF-ENV-REP-RHS-000204

2 April 2026

Revision: 4

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
Rev 1	21 November 2025	NG	DJ	ES
Rev 2	26 February 2026	NG	DJ	ES
Rev 3	2 April 2026	DJ	DJ	ES

Table of Contents

Figures in Text

1.0 Introduction

1. This **Annex 11.2L: Rarely Recorded Species Information** provides details and summaries of raw counts, abundance estimates and density estimates of all species with less than 10 counts across 30 surveys. This includes seven species (Arctic skua, golden plover, great shearwater, grey phalarope, lesser black-backed gull, red-throated diver and sooty shearwater).

Each species account includes the following information:

- **Raw observations:** Maps are provided illustrating the distribution of DAS raw observations recorded for each survey (up to a total of 30 surveys). For surveys where there were no raw observations recorded, a map is not provided. Note that the maps illustrate the distribution of birds identified to species, it is not possible to illustrate apportioned birds (**Technical Appendix 11.2 Baseline Site Characterisation Section 3.3.3**).
- **Raw counts:** Summary of peak raw bird counts recorded in flight and sat on the water in the WDA plus 4 km buffer (these counts are provided in **Annex 11.2E: Raw Counts**). For each species where appropriate, peak counts include additional birds apportioned from species groups (refer to **Technical Appendix 11.2 Baseline Site Characterisation Section 3.3.3**).
- **Design-based density estimates:** Summary of peak design-based density estimates of birds in flight in the WDA. These density estimates are provided in **Annex 11.2G: Density estimates per survey of birds in flight**. For each species where appropriate, peak density estimates include additional birds apportioned from species groups (refer to **Technical Appendix 11.2 Baseline Site Characterisation Section 3.3.3**). The species accounts present density estimates of birds in flight within the WDA because it is the density of birds in flight within the WDA that are used as data inputs to assess collision risk in the EIAR and RIAA.
- **Design-based abundance estimates:** Summary of peak design-based abundance estimates of birds sat on the water and in flight in the WDA plus 2 km buffer (for all species except divers) or the WDA plus 4 km buffer (divers only). These abundance estimates are provided in **Annex 11.2K: Abundance estimates per survey of sitting and flying birds**. For each species where appropriate, peak density estimates include additional birds apportioned from species groups (refer to **Technical Appendix 11.2 Baseline Site Characterisation Section 3.3.3**). The species accounts present abundance estimates of birds sat on the water and in flight within the WDA plus 2 km buffer (all species except divers) or birds sat on the water and in flight within the WDA plus 4 km buffer (divers only) because it is the abundance of sitting and flying birds in these survey areas that are used as data inputs to assess displacement impacts in the EIAR and RIAA.

2.0 Species Accounts

2.1 Arctic skua

2.1.1 Raw observations

2. Raw observations of Arctic skuas (including birds sat on the water and in flight) are presented for each survey in **Figure 1**. Arctic skuas were identified within the WDA plus 4 km buffer in 3 out of 30 surveys.

3. Due to the limited number of observations, there were no clear spatial distribution patterns of Arctic skuas recorded across the WDA plus 4 km buffer.

2.1.2 Raw counts

4. A total of five Arctic skua counts, including birds sat on the water and in flight, were recorded in the WDA plus 4 km buffer during baseline surveys (refer to **Technical Appendix 11.2: Baseline Site Characterisation, Table 6**).

5. All raw counts were recorded during the Arctic skua breeding season and the same observations also overlapped with the spring and autumn migration periods (refer to **Technical Appendix 11.2: Baseline Site Characterisation, Table 4**). A peak count of 3 Arctic skuas were recorded in the WDA plus 4 km buffer in May 2022, refer to **Annex 11.2E: Raw Counts, Table 2**). In addition to the peak count, one Arctic skua was recorded within the WDA plus 4 km buffer in August 2022 and one in June 2023.

2.1.3 Design-based density estimates

6. Design-based density estimates of Arctic skuas in flight in the WDA in each survey are provided in **Annex 11.2G: Density estimates per survey of birds in flight**.

7. Arctic skua density estimates of birds in flight in the WDA were very low. The highest peak density of birds in flight in the WDA (0.03 bird/km^2, refer to **Annex 11.2G: Density estimates per survey of birds in flight, Table 2**) was recorded in May 2022.

2.1.4 Design-based abundance estimates

8. Design-based abundance estimates of Arctic skuas recorded sat on the water and in flight in each survey are provided in **Annex 11.2K: Abundance estimates per survey of sitting and flying birds**.

9. The highest abundance of Arctic skua (17.99 birds) was recorded in the WDA plus 2 km buffer in May 2022 (refer to **Annex 11.2K: Abundance estimates per survey of sitting and flying birds, Table 2**). A lower abundance of Arctic skuas in the WDA plus 2 km buffer was recorded in August 2022 (5.97 birds) and June 2023 (6.17 birds).

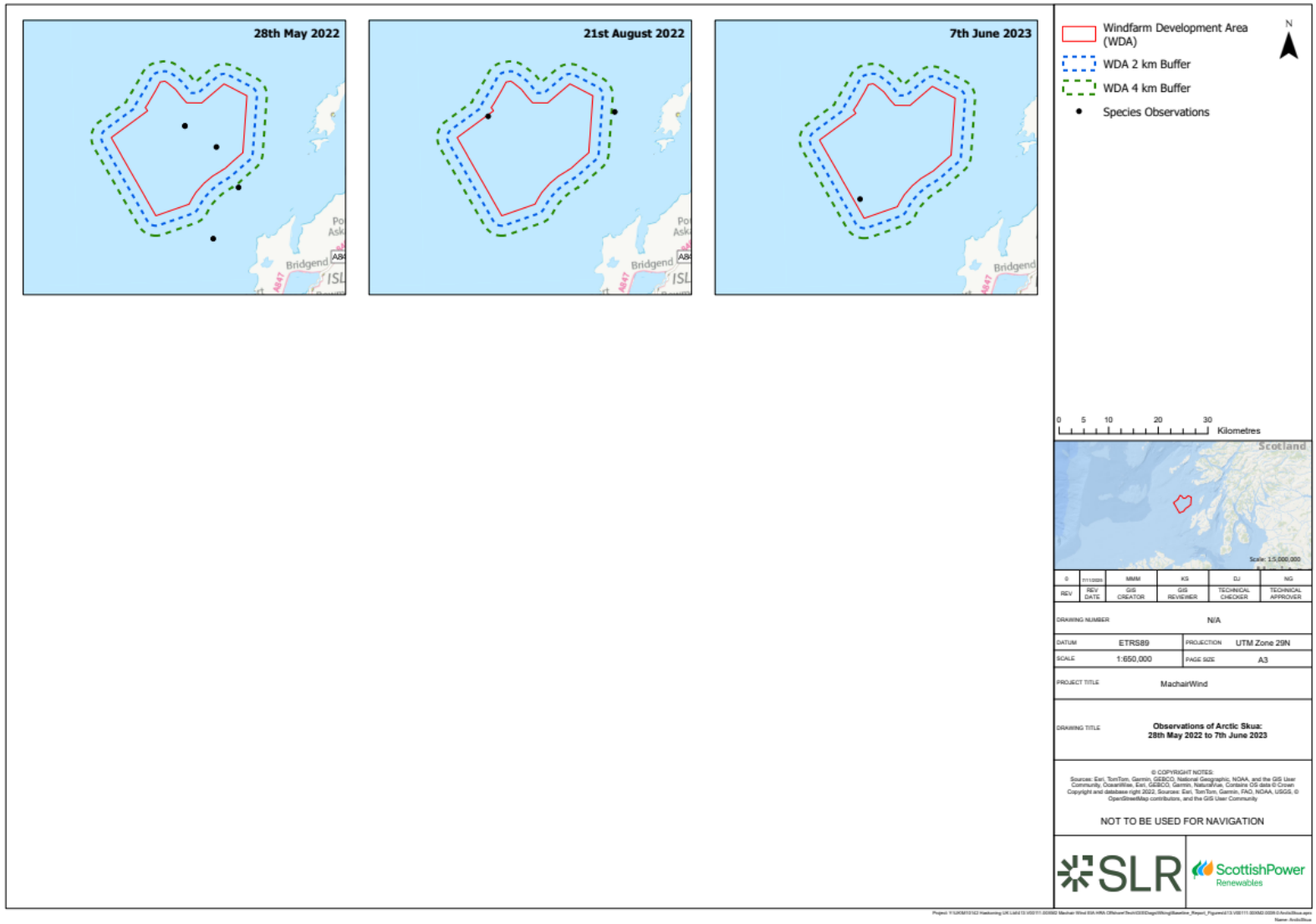


Figure 1. Observations of Arctic Skua: 28th May 2022 to 7th June 2023

2.2 Golden plover

2.2.1 Raw observation / counts

10. One golden plover observation (one count, refer to **Annex 11.2E: Raw Counts, Table 22**) was recorded in flight in one out of 30 surveys, within the WDA in August 2022 (**Figure 2**).

2.2.2 Design-based density estimates

11. Golden plover density estimate of birds in flight in the WDA in August 2022 was very low (0.01 bird/km^2, refer to **Annex 11.2G: Density estimates per survey of birds in flight, Table 22**).

2.2.3 Design-based abundance estimates

2.2.4 The abundance of golden plover in the WDA plus 2 km buffer in August 2022 was 5.97 birds (refer to **Annex 11.2K: Abundance estimates per survey of sitting and flying birds, Table 22**).

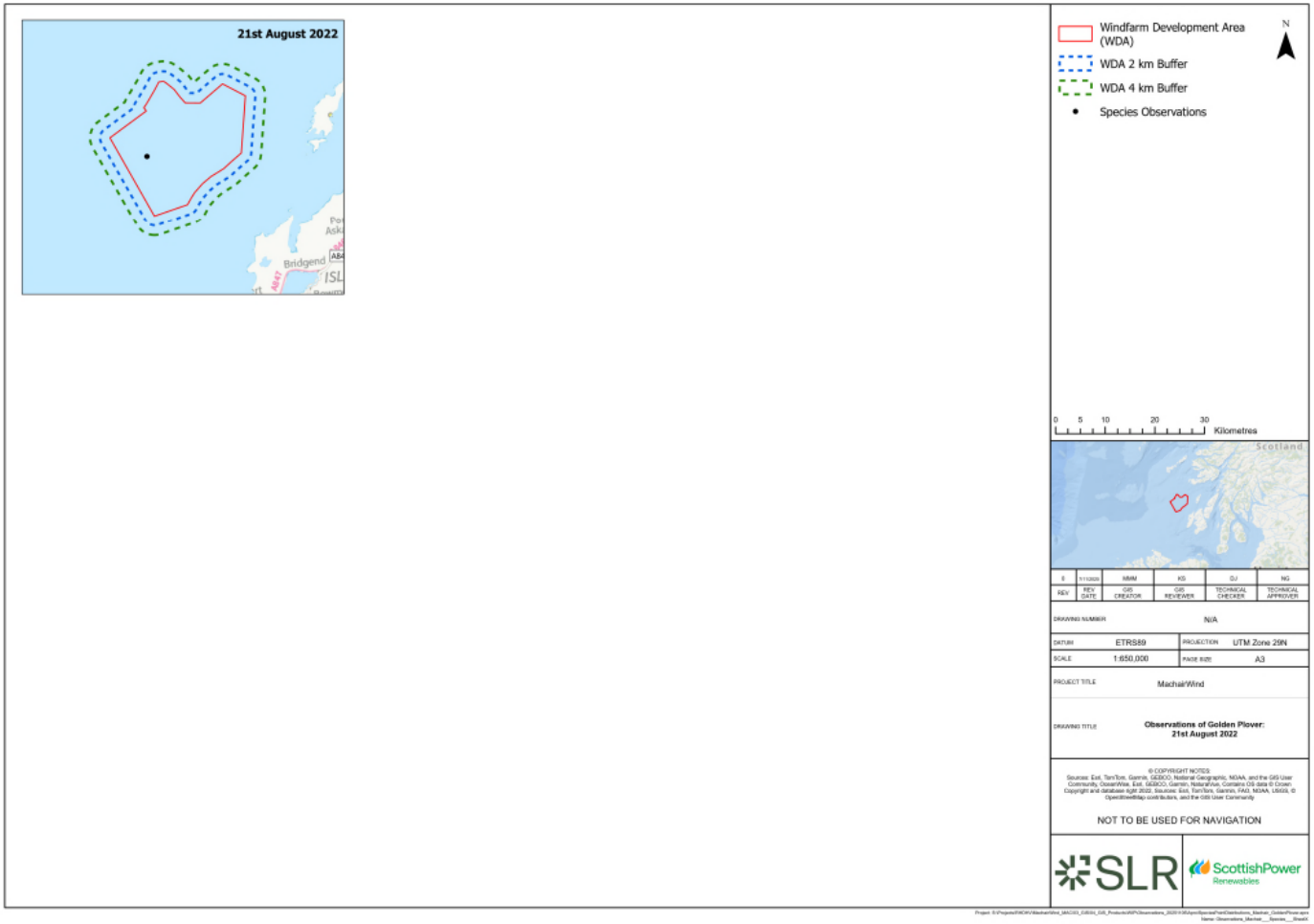


Figure 2. Observations of Golden Plover: 21st August 2022

2.3 Great shearwater

2.3.1 Raw observation / counts

12. One great shearwater observation (one count, refer to **Annex 11.2E: Raw Counts, Table 26**) was recorded in flight in one out of 30 surveys, between the WDA and the surrounding 2 km buffer in November 2022 (**Figure 3**).

2.3.2 Design-based density estimates

13. No great shearwaters were recorded in flight within the WDA in any survey month refer to (**Annex 11.2G: Density estimates per survey of birds in flight, Table 26**).

2.3.3 Design-based abundance estimates

14. The abundance of great shearwater in the WDA plus 2 km buffer in November 2022 was 6.07 birds (refer to **Annex 11.2K: Abundance estimates per survey of sitting and flying birds, Table 26**).

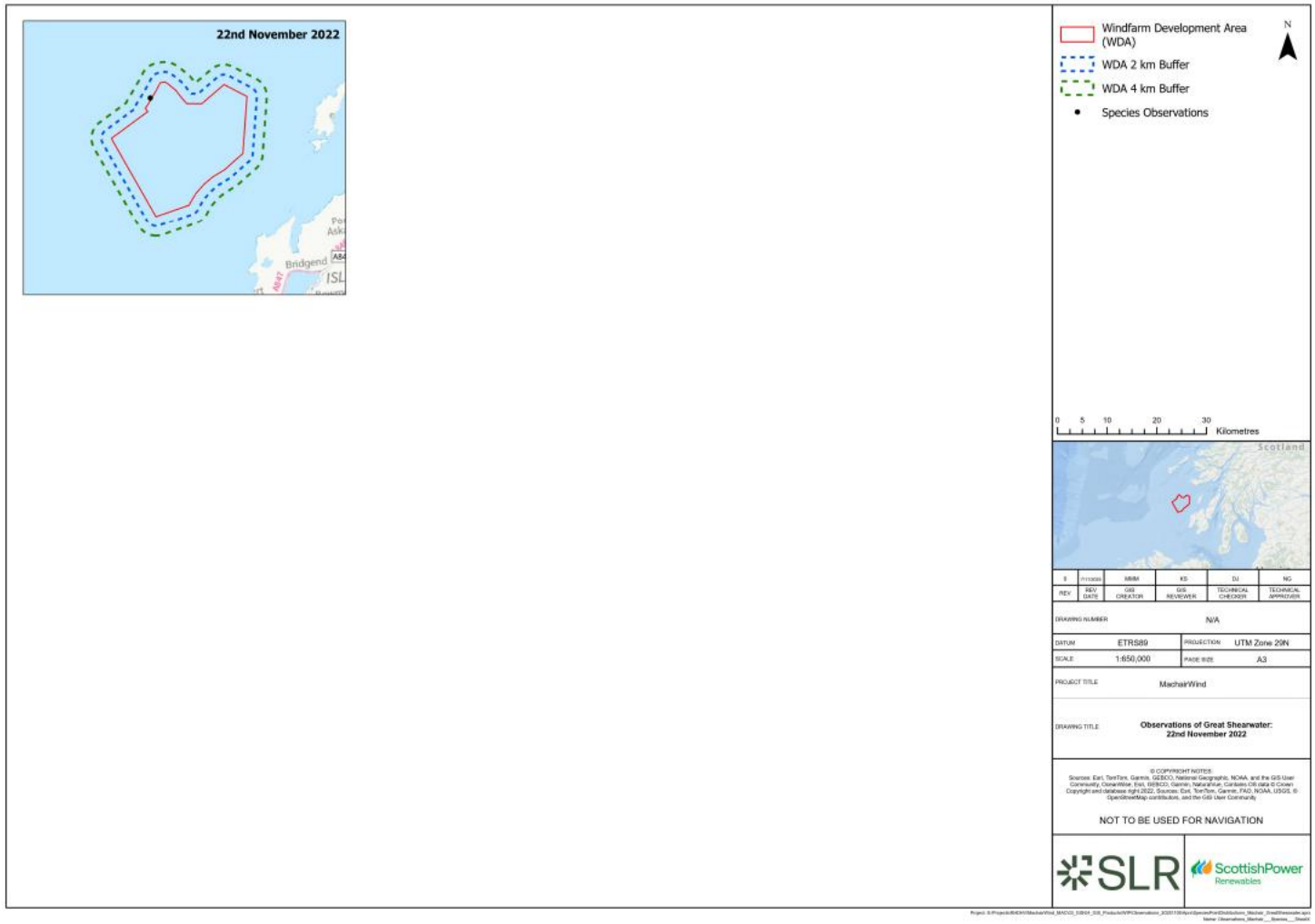


Figure 3. Observations of Great Shearwater: 22nd November 2022

2.4 Grey phalarope

2.4.1 Raw observation / counts

15. One grey phalarope observation (one count, refer to **Annex 11.2E: Raw Counts, Table 28**) was recorded in flight in one out of 30 surveys, between the 2 km and 4 km buffer surrounding the WDA in August 2023 (**Figure 4**).

2.4.2 Design-based density estimates

16. No grey phalaropes were recorded in flight within the WDA in any survey month (refer to **Annex 11.2G: Density estimates per survey of birds in flight, Table 28**).

2.4.3 Design-based abundance estimates

17. No grey phalaropes were recorded within the WDA plus 2 km buffer in any survey month (refer to **Annex 11.2K: Abundance estimates per survey of sitting and flying birds, Table 28**).

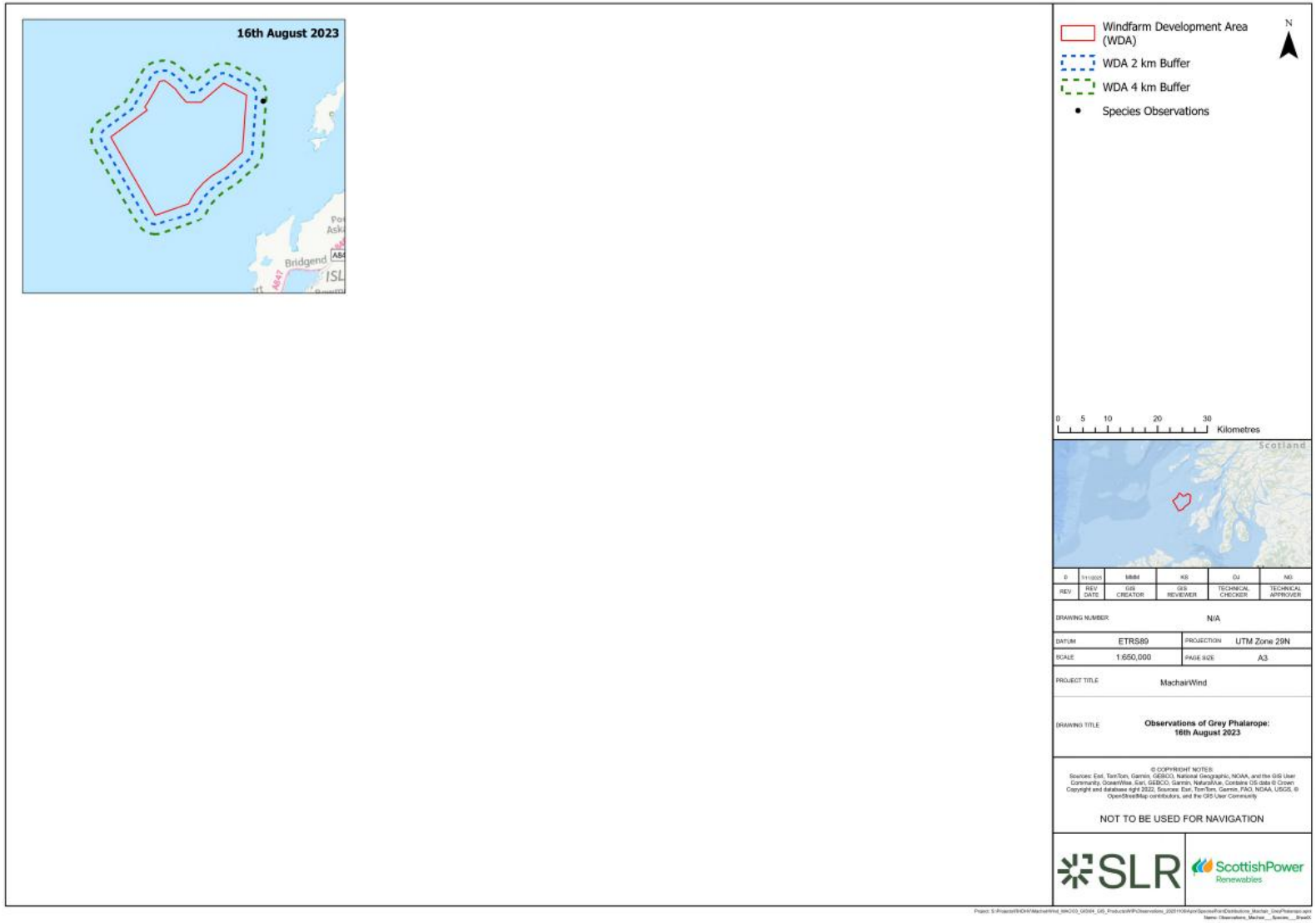


Figure 4. Observations of Grey Phalarope: 16th August 2023

2.5 Lesser black-backed gull

2.5.1 Raw observations / counts

18. One lesser black-backed gull observation (one count, refer to **Annex 11.2E: Raw Counts, Table 39**) was recorded in flight in one out of 30 surveys, between the 2 km and 4 km buffer surrounding the WDA in August 2022 (**Figure 5**).

19. In addition, one lesser black-backed gull was recorded outwith the 4 km buffer in June 2021.

2.5.2 Design-based density estimates

20. No lesser black-backed gulls were recorded in flight within the WDA in any survey month (refer to **Annex 11.2G: Density estimates per survey of birds in flight, Table 39**).

2.5.3 Design-based abundance estimates

21. No lesser black-backed gulls were recorded within the WDA plus 2 km buffer in any survey month (refer to **Annex 11.2K: Abundance estimates per survey of sitting and flying birds, Table 39**).

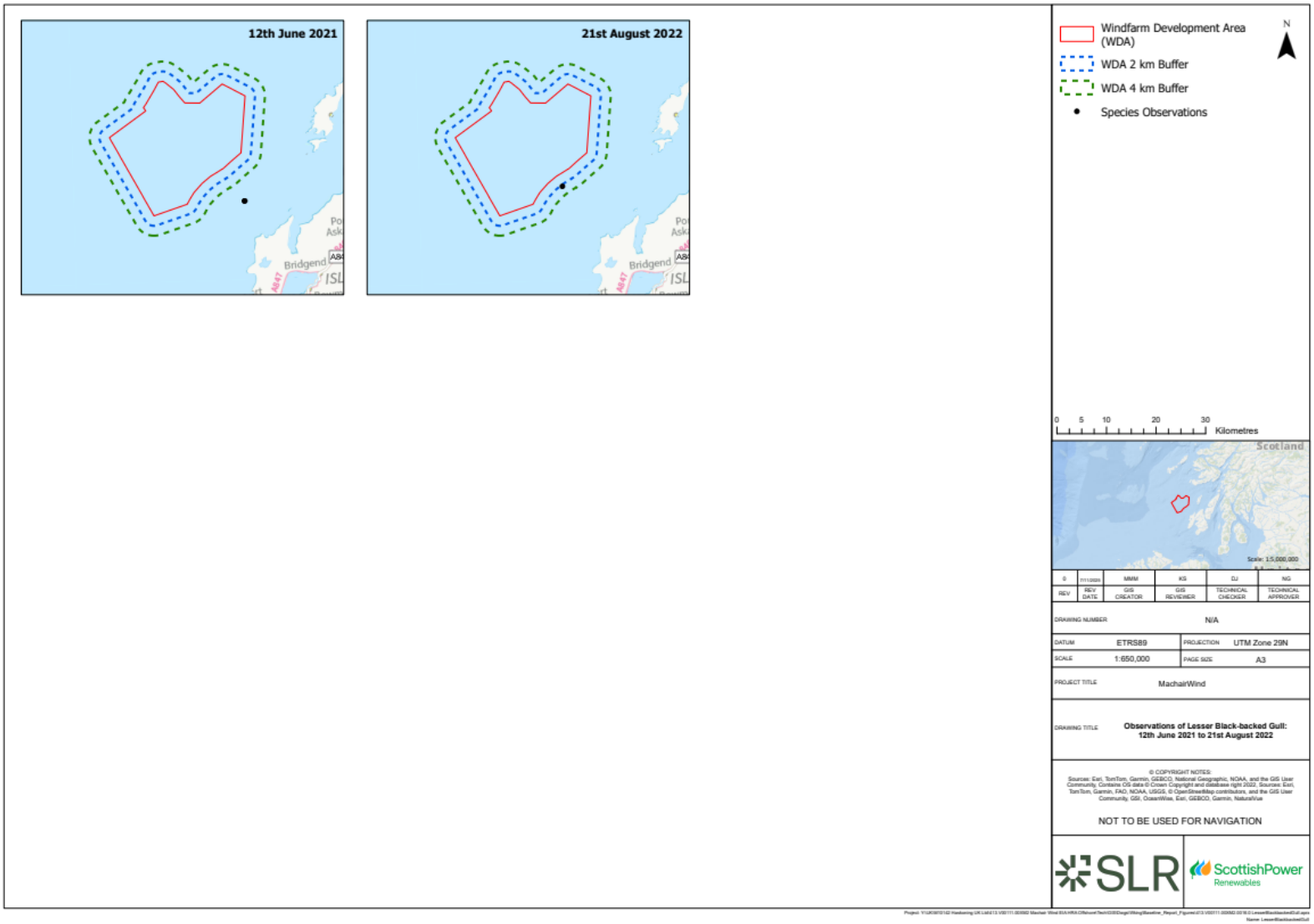


Figure 5. Observations of Lesser Black-backed Gull: 12th June 2021 to 21st August 2022

2.6 Red-throated diver

2.6.1 Raw observations / counts

22. Two observations of red-throated divers (two counts, one in September 2021 and one in May 2023, refer to **Annex 11.2E: Raw Counts, Table 50**) were recorded in flight in 2 out of 30 surveys within the WDA (**Figure 6**).

2.6.2 Design-based density estimates

23. Red-throated diver density estimates of birds in flight in the WDA were very low. In both September 2021 and May 2023, the density of birds in flight in the WDA was 0.01 bird/km^2 (refer to **Annex 11.2G: Density estimates per survey of birds in flight, Table 50**).

2.6.3 Design-based abundance estimates

24. The highest abundance of red-throated diver (6.53 birds) was recorded in the WDA plus 4 km buffer in May 2023 (refer to **Annex 11.2K: Abundance estimates per survey of sitting and flying birds, Table 50**). A lower abundance of red-throated divers in the WDA plus 4 km buffer was recorded in September 2021 (6.32 birds).

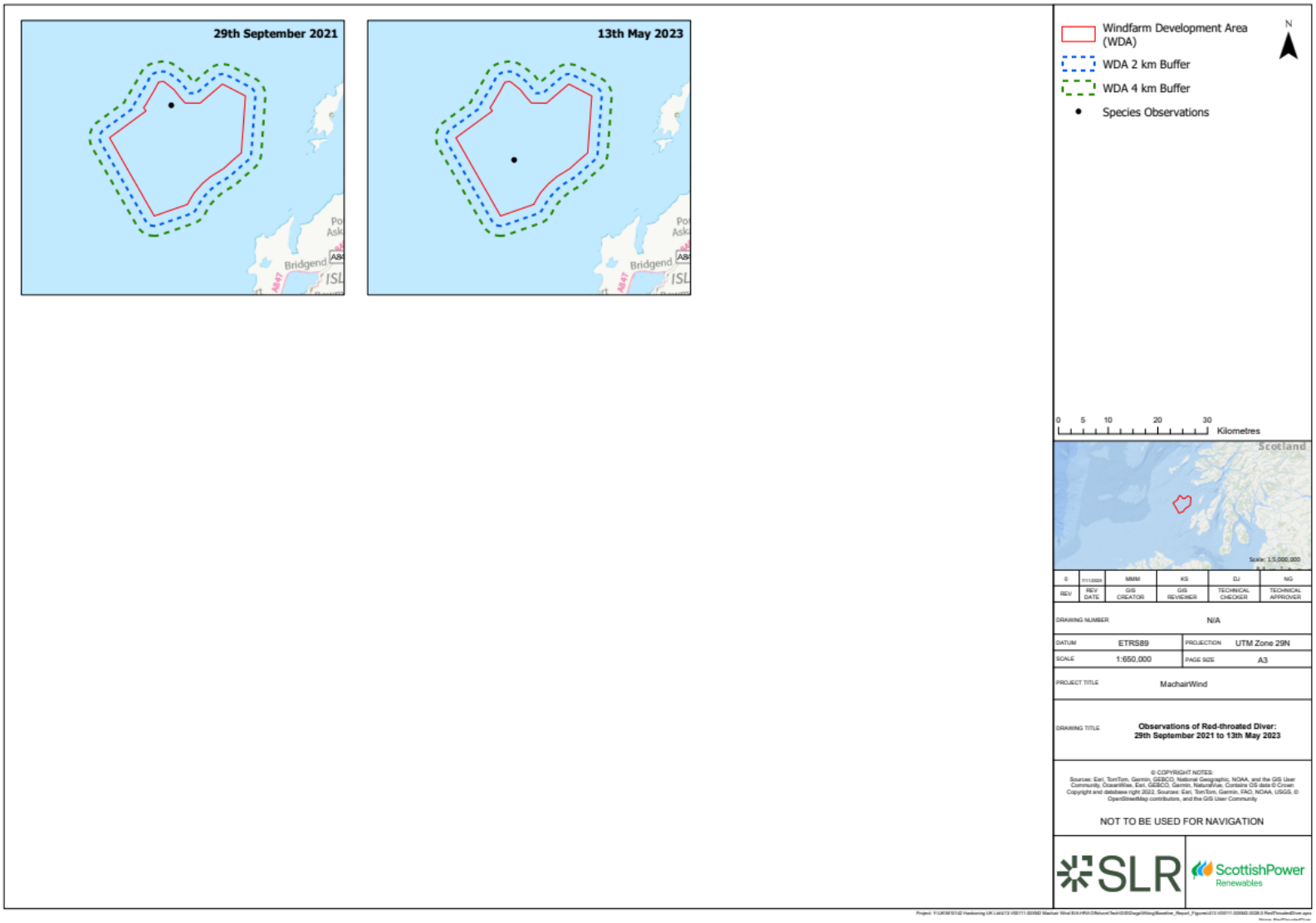


Figure 6. Observations of Red-throated Diver: 29th September 2021 to 13th May 2023

2.7 Sooty shearwater

2.7.1 Raw observations

25. Raw observations of sooty shearwaters (including birds sat on the water and in flight) are presented for each survey in **Figure 7**. Sooty shearwaters were identified within the WDA plus 4 km buffer in 3 out of 30 surveys.

26. Due to the limited number of observations, there were no clear spatial distribution patterns of sooty shearwaters recorded across the WDA plus 4 km buffer.

2.7.2 Raw counts

27. A total of five sooty shearwater counts, including birds sat on the water and in flight, were recorded in the WDA plus 4 km buffer during baseline surveys (refer to **Technical Appendix 11.2: Baseline Site Characterisation, Table 6**). A peak count of 3 sooty shearwaters were recorded in the WDA plus 4 km buffer in July 2022, refer to **Annex 11.2E: Raw Counts, Table 52**). In addition to the peak count, one sooty shearwater was recorded in November 2022 and one bird was recorded between the 2 km and 4 km buffer in August 2023.

2.7.3 Design-based density estimates

28. Sooty shearwater density estimates of birds in flight in the WDA were very low. In both July 2022 and November 2022, the density of birds in flight in the WDA was 0.01 bird/km^2 (refer to **Annex 11.2G: Density estimates per survey of birds in flight, Table 52**). No sooty shearwaters were recorded in flight within the WDA in August 2023.

2.7.4 Design-based abundance estimates

29. The highest abundance of sooty shearwater (18.15 birds) was recorded in the WDA plus 2 km buffer in July 2022 (refer to **Annex 11.2K: Abundance estimates per survey of sitting and flying birds, Table 52**). A lower abundance of sooty shearwaters in the WDA plus 2 km buffer was recorded in November 2022 (6.07 birds). No sooty shearwaters were recorded within the WDA plus 2 km buffer in August 2023.

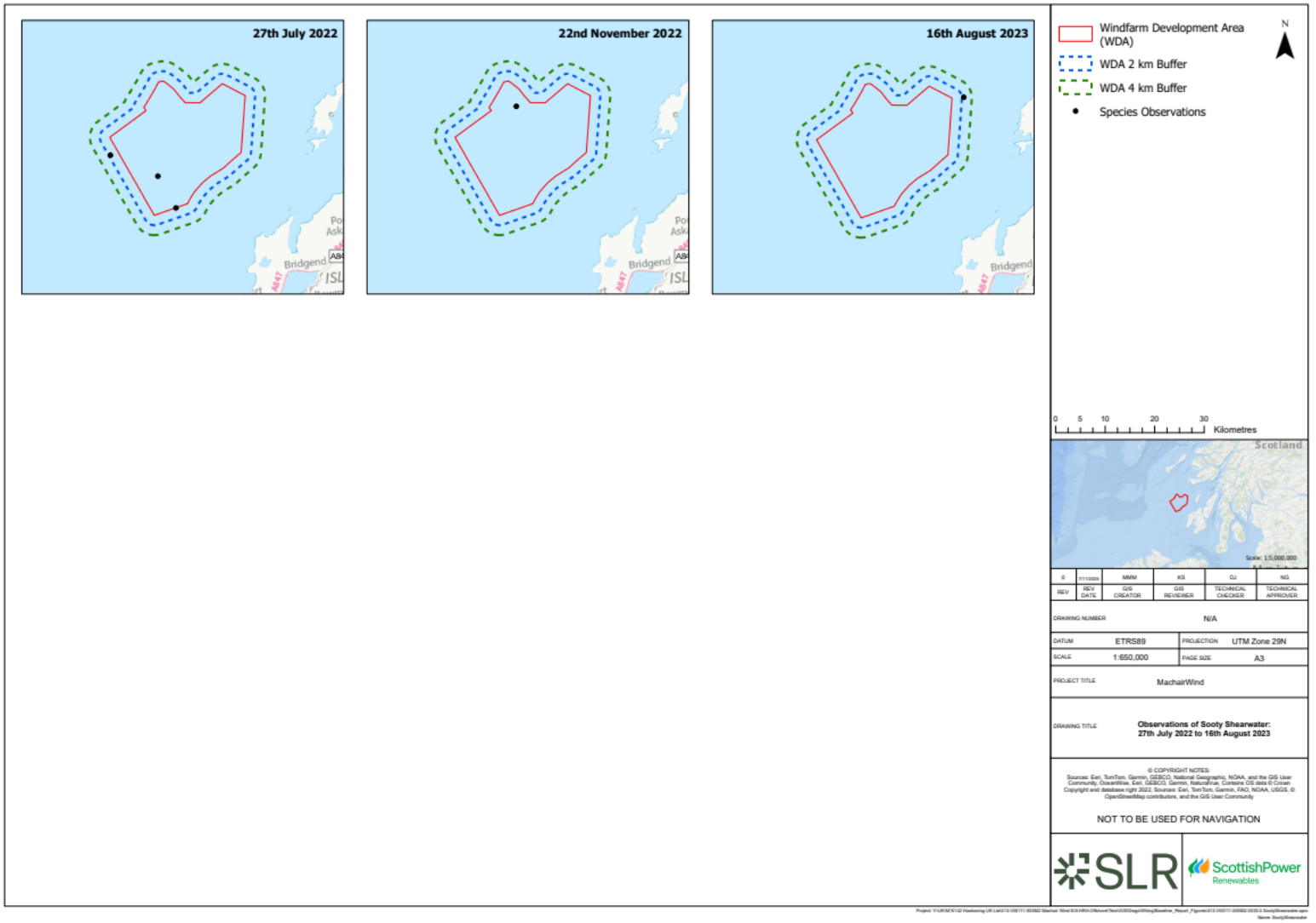
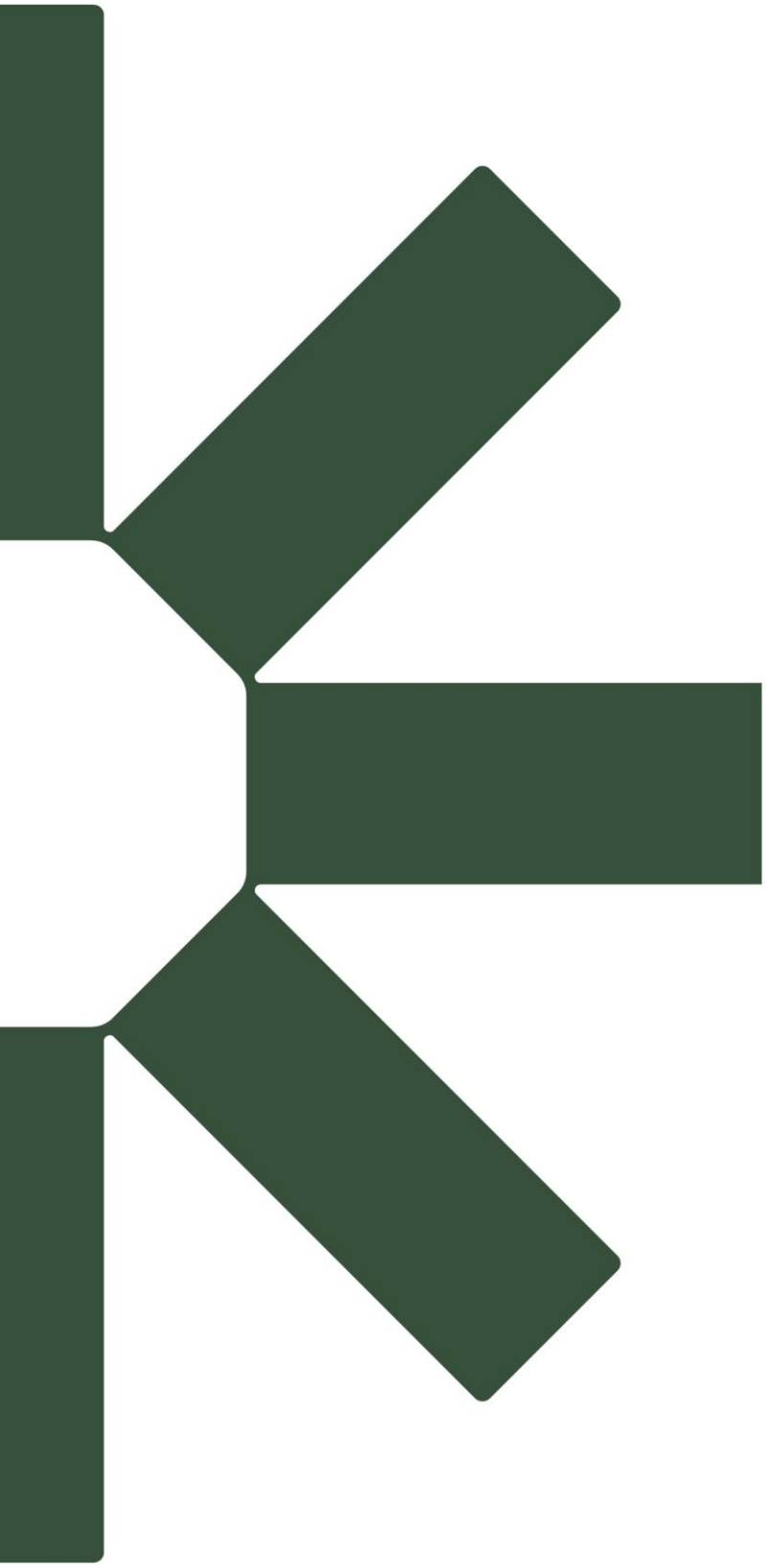


Figure 7. Observations of Sooty Shearwater: 27th July 2022 to 16th August 2023



Making Sustainability Happen