

National Parks







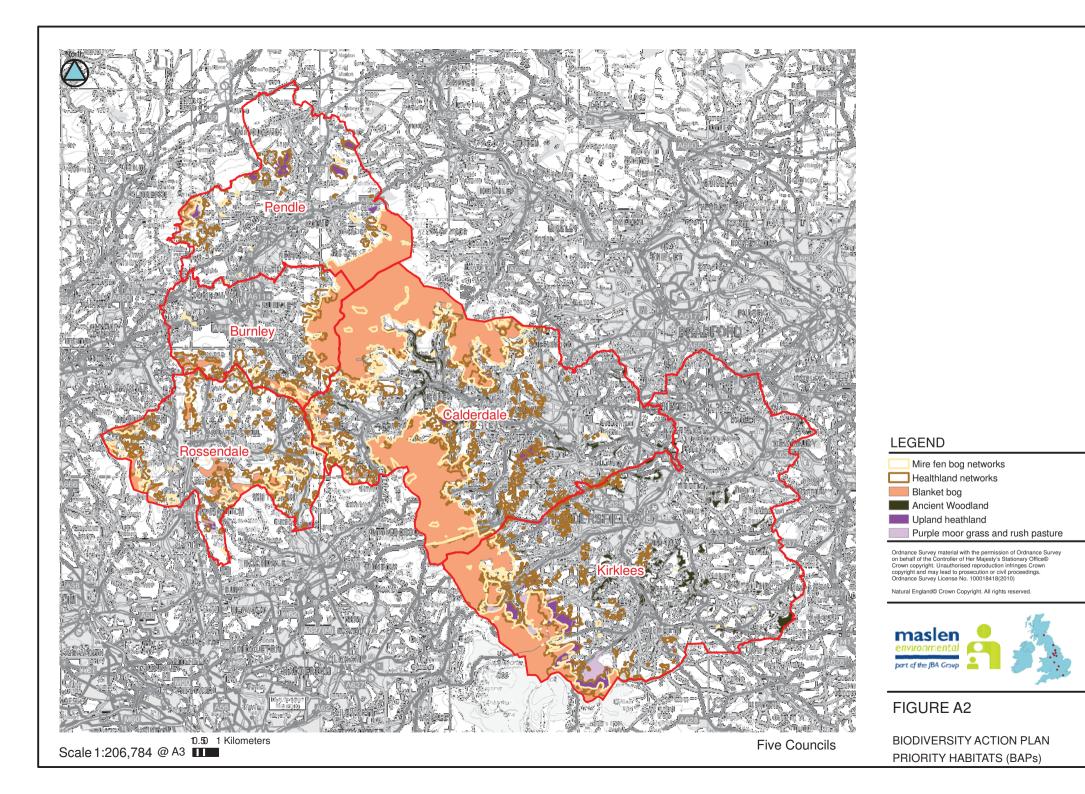
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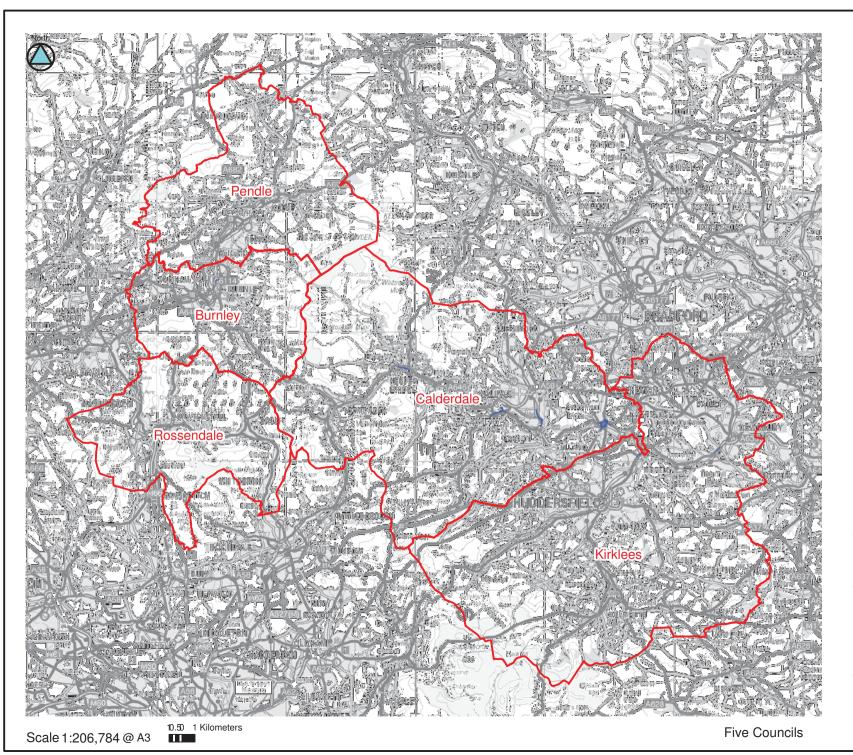
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FIGURE A1

ENVIRONMENTAL DESIGNATIONS







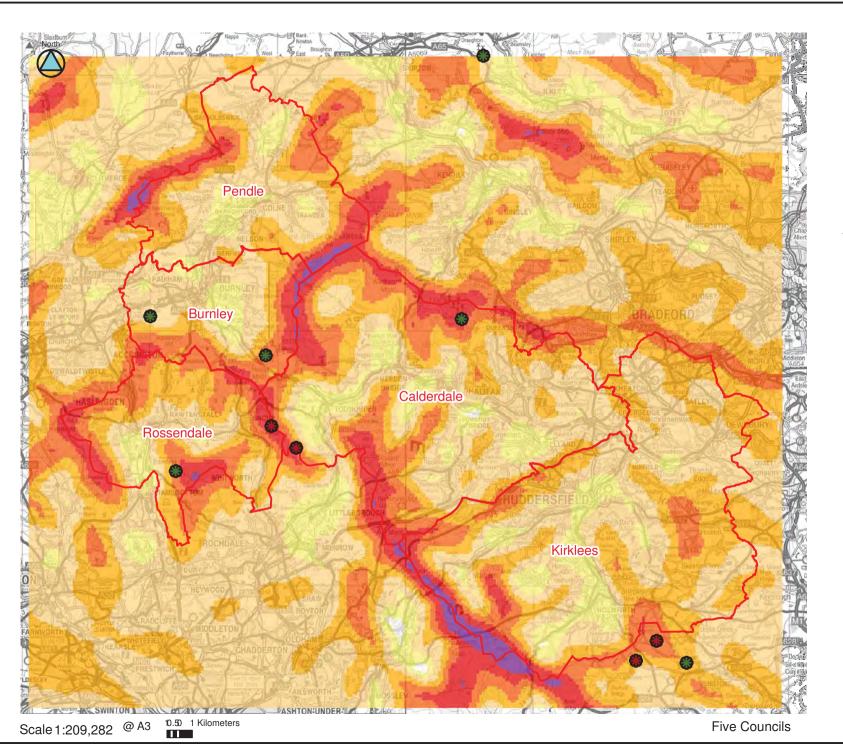
Air Quality Management Areas

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FIGURE A3

AIR QUALITY MANAGEMENT AREAS



Consented Wind Farms

Operational Wind Farms

Wind Speed (m/s) at 10m AGL

<3 m/s

3-4 m/s

4-5 m/s

5-6 m/s

6-7 m/s

0 / 111/3

7-8 m/s

8-9 m/s

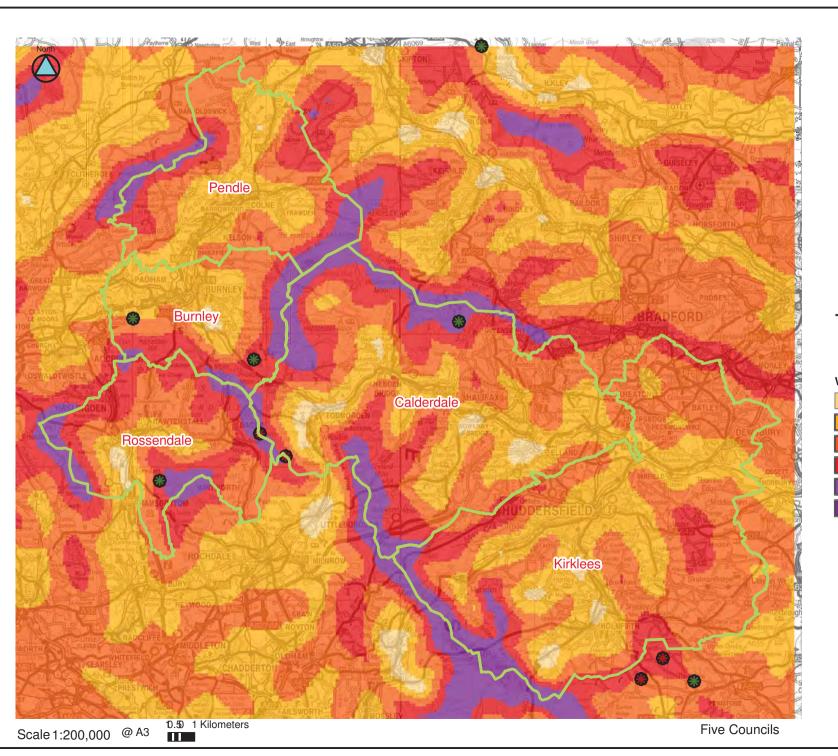
>9 m/s

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FIGURE A4

Wind Resources Map 10m AGL



Consented Wind Farms

Operational Wind Farms

Wind Speed (m/s) at 45m AGL

<5 m/s

....

5-6 m/s

6-7 m/s

7-8 m/s

8-9 m/s

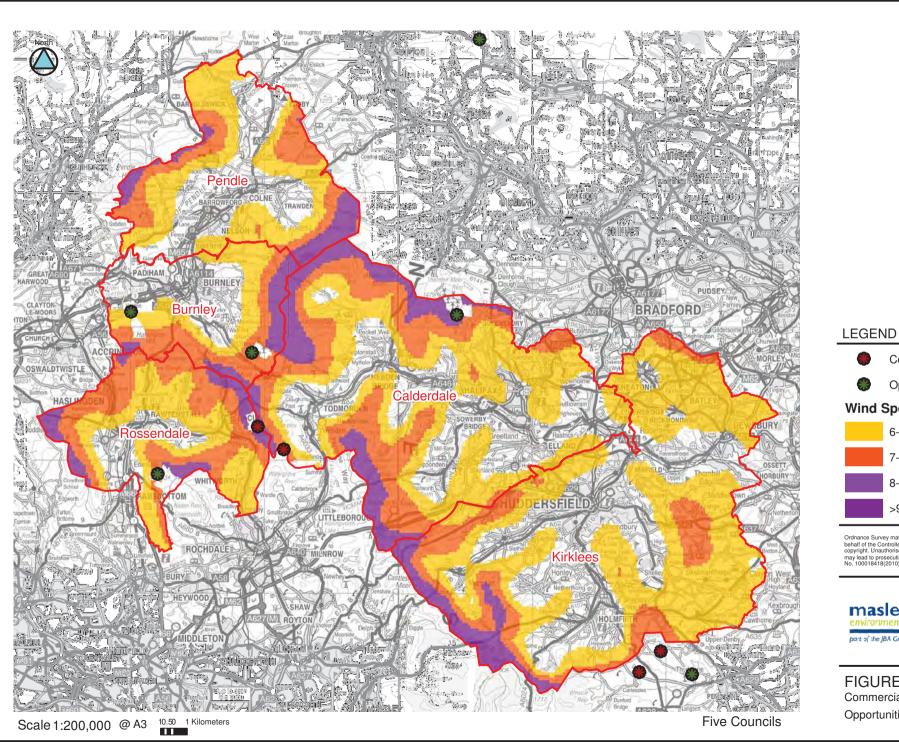
>9 m/s

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FIGURE A5

Wind Resources Map 45m AGL



- Consented Wind Farms
- Operational Wind Farms

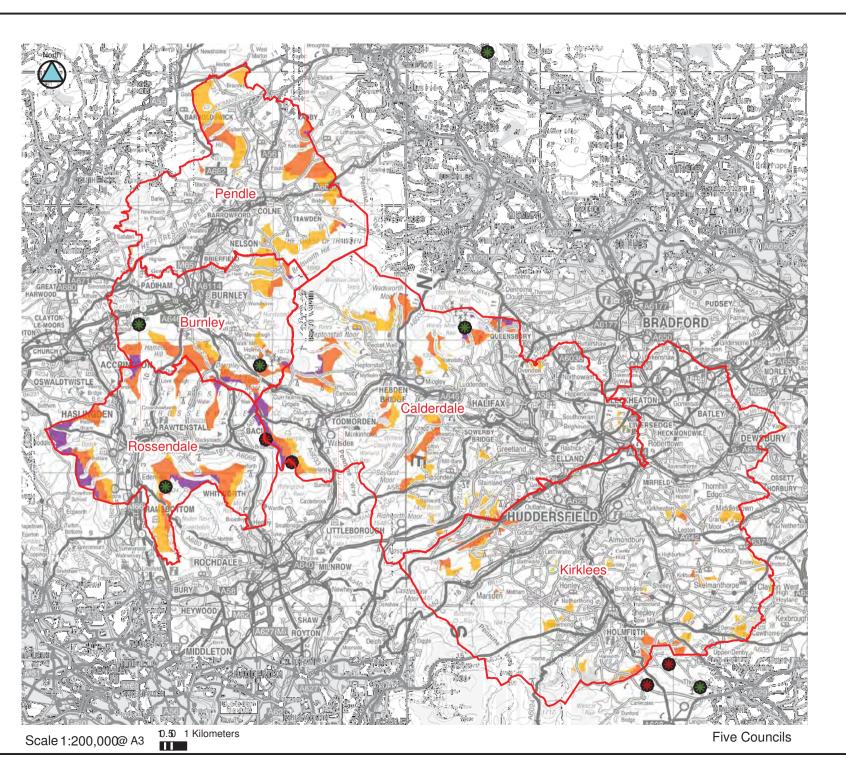
Wind Speed (m/s) at 45m AGL

- 6-7 m/s
- 7-8 m/s
- 8-9 m/s
- >9 m/s

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FIGURE A6 Commercial Scale Wind Energy Opportunities



Consented Wind Farms

Operational Wind Farms

Wind Speed (m/s) at 45m AGL

6-7 m/s

7-8 m/s

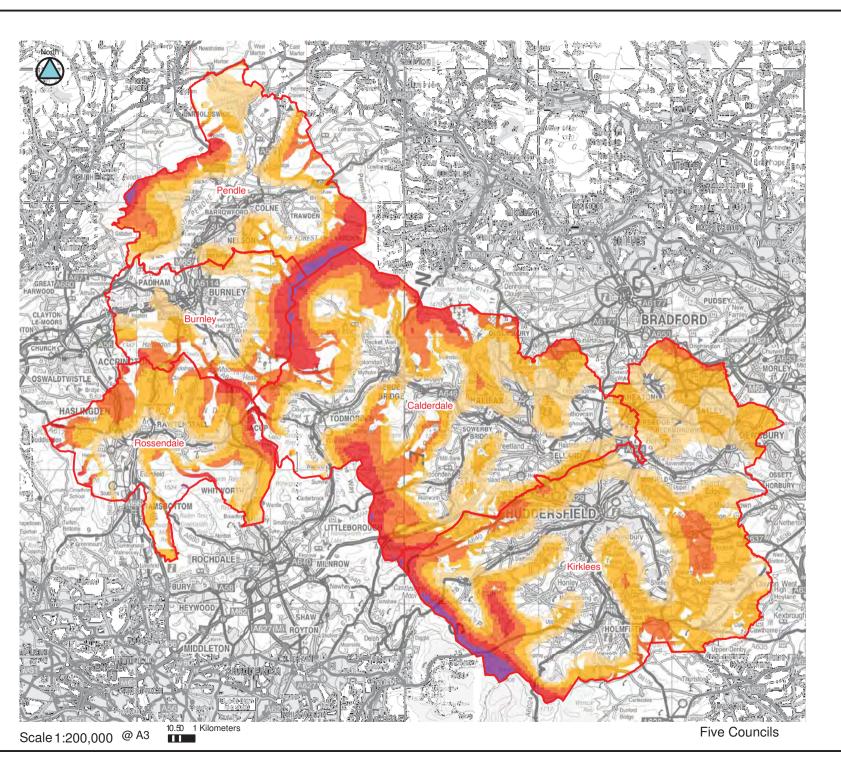
8-9 m/s

>9 m/s

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FIGURE A7 Commercial Scale Wind Energy Constraints Assessment



Wind Speed (m/s) at 10m AGL

4.5 - 5 m/s 5 - 6 m/s

6 - 7 m/s

7 - 8 m/s

8 - 9 m/s

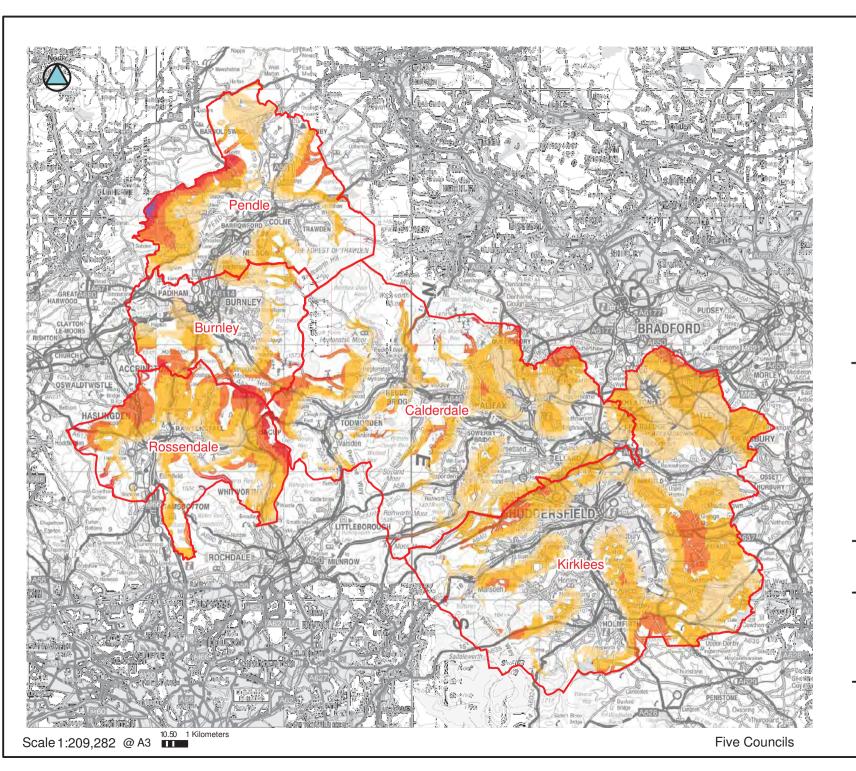
>9 m/s

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FIGURE A8

Small Scale Wind Energy Opportunities Assessment



Wind Speed (m/s) at 10m AGL







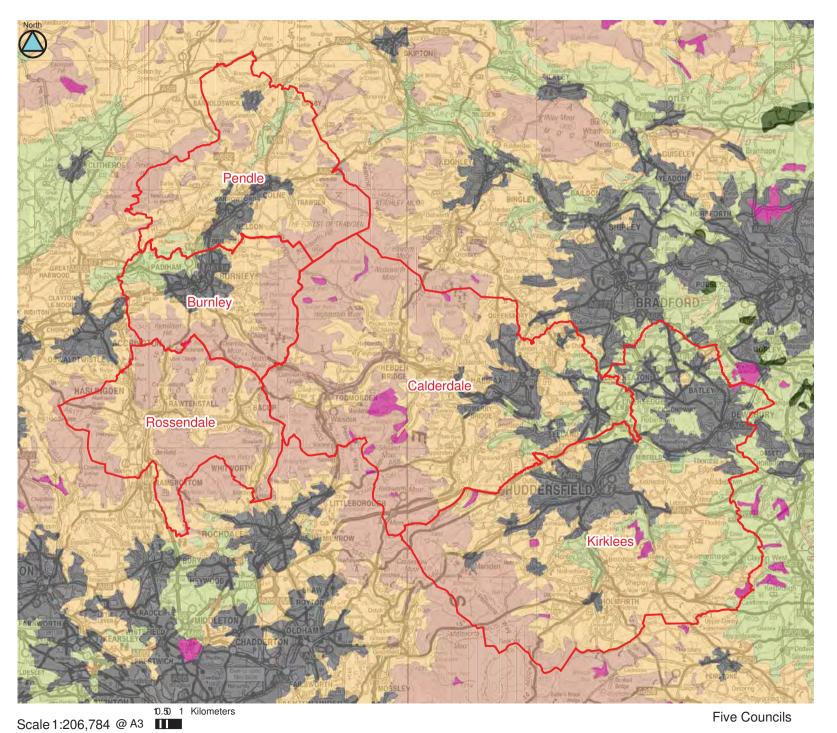
8 - 9 m/s

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FIGURE A9

Small Scale Wind Energy Constraints Assessment



Agricultural Land Classification GRADE 1

GRADE 2
GRADE 3
GRADE 4

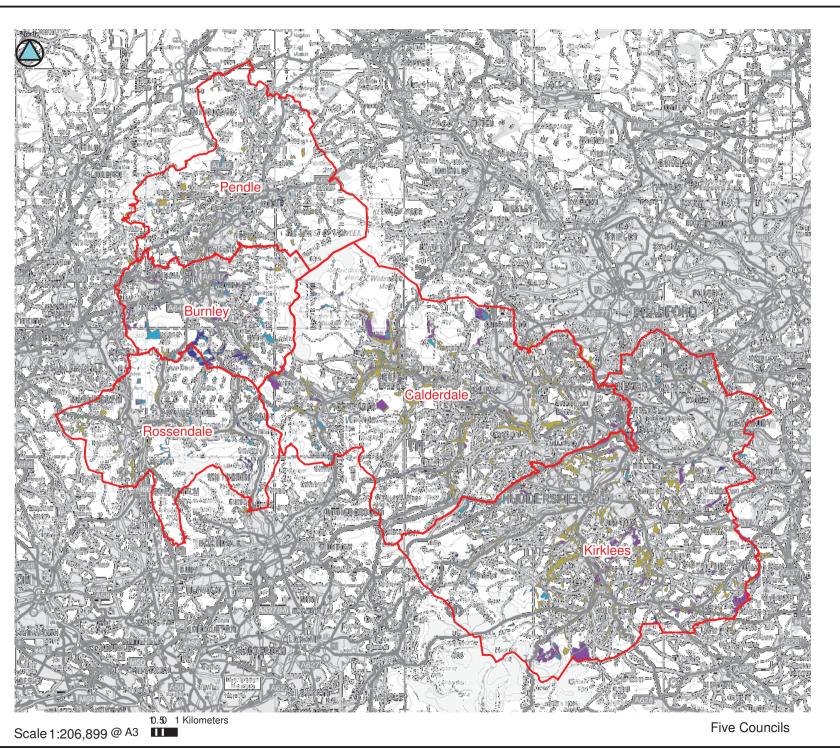
GRADE 5

NON AGRICULTURAL
URBAN

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FIGURE A 10 AGRICULTURAL LAND CLASSIFICATIONS IN THE STUDY AREA



Woodland Management Indicator (WMI)

- Grants and Licensing Activity
- Productive managed woodland
- Non-productive managed woodland
- Under-managed woodland
- Non-productive woodland

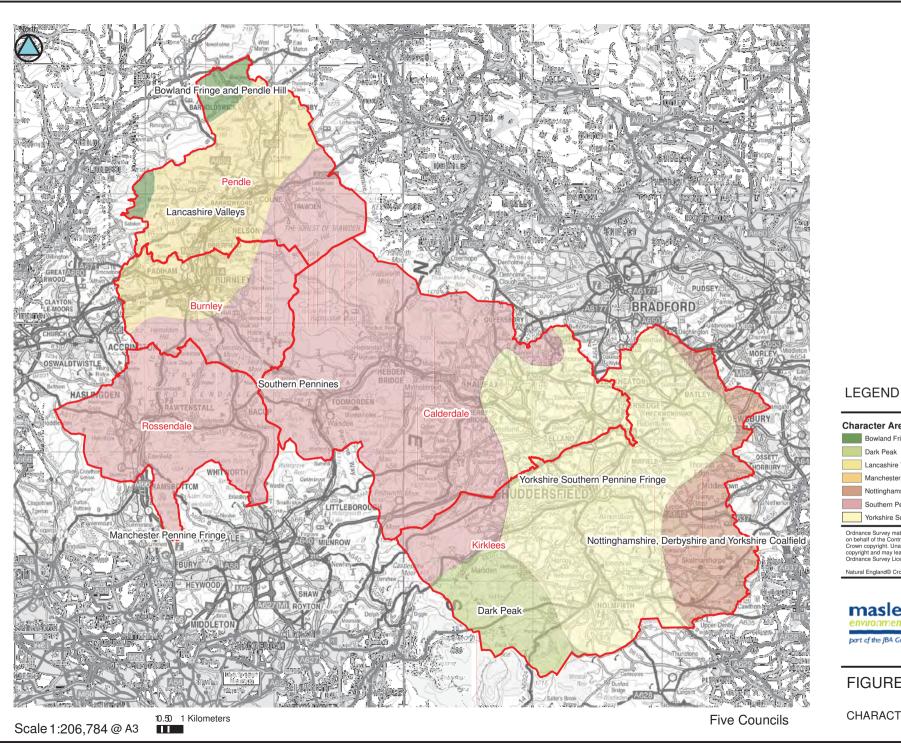
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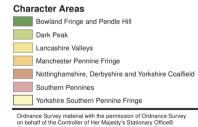
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FIGURE A11

FORESTRY COMMISSION
WOODLAND CLASSIFICATIONS





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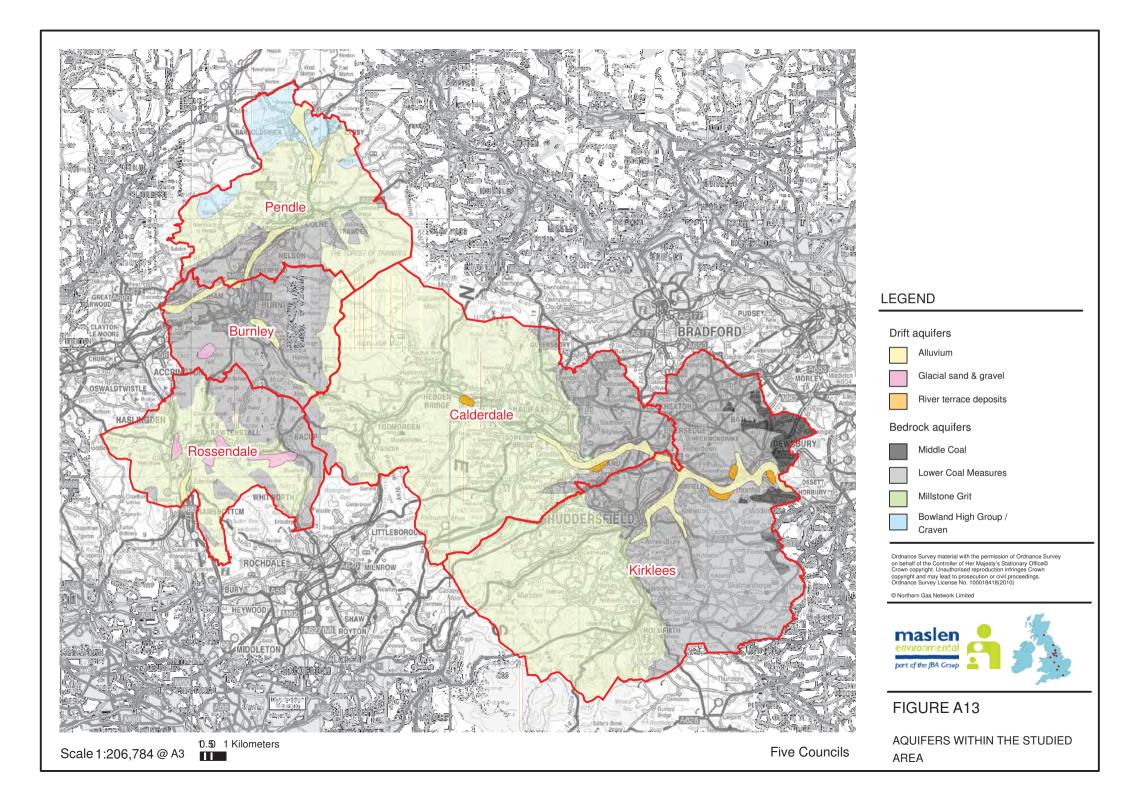
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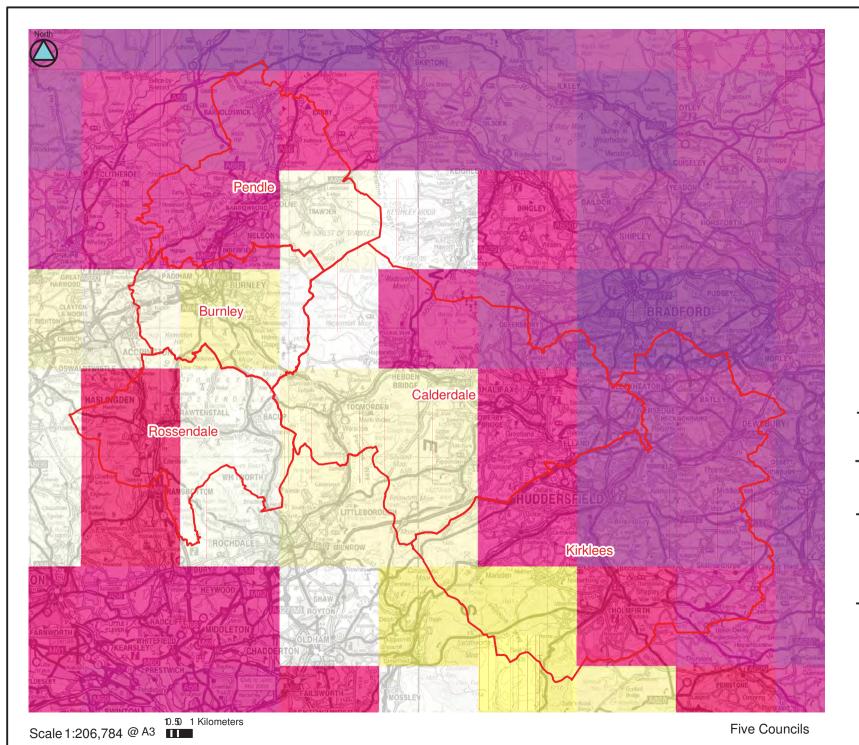
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FIGURE A12

CHARACTER AREAS





Irradiation (kWh/m2)

High :1120



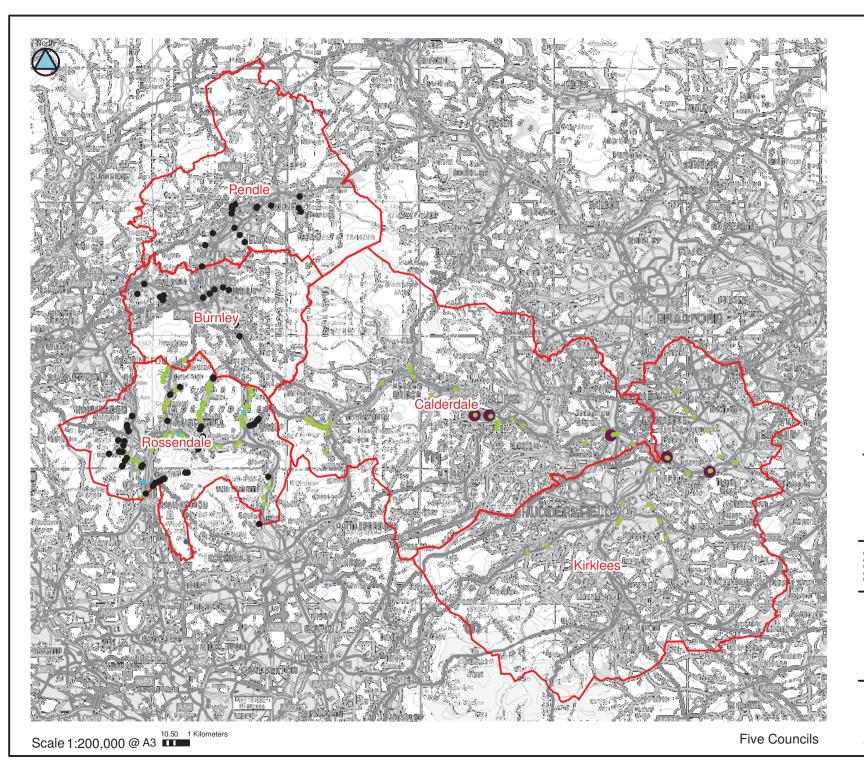
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FIGURE A14

YEARLY SUM OF GLOBAL IRRADIATION ON OPTIMALLY INCLINED SURFACES (kWh/m2 between 1981-1990)



NFCDD Weirs by Height

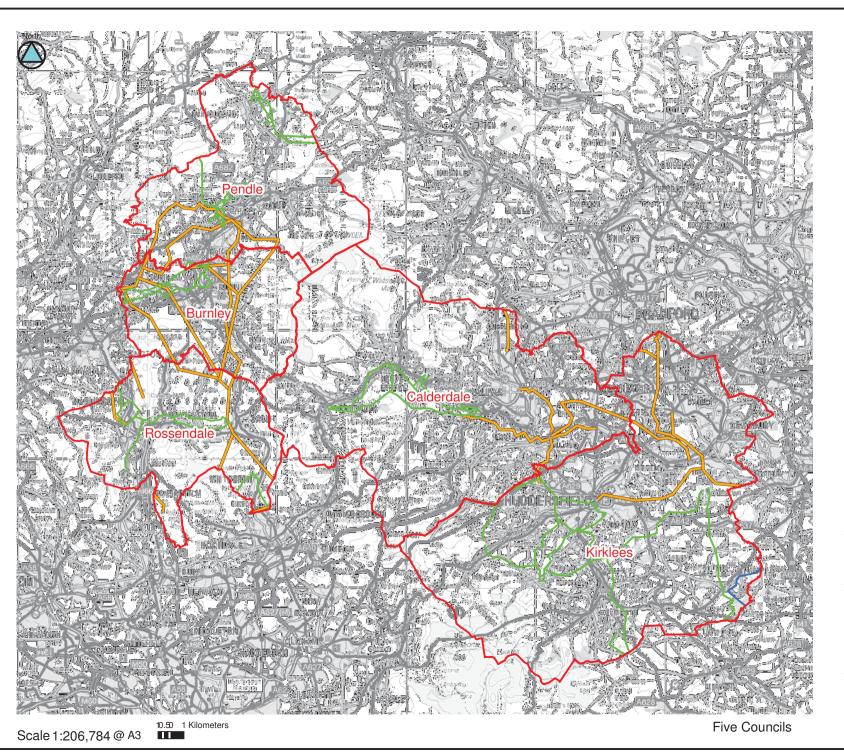
- > 3 m
- 2 to 3 m
- <2 m
- Unknown
- LYRES Identified Hydro Sites

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FIGURE A15

NFCDD and LYRES Identified Weirs for Hydropower



Type Electricity Network

---- 33kv

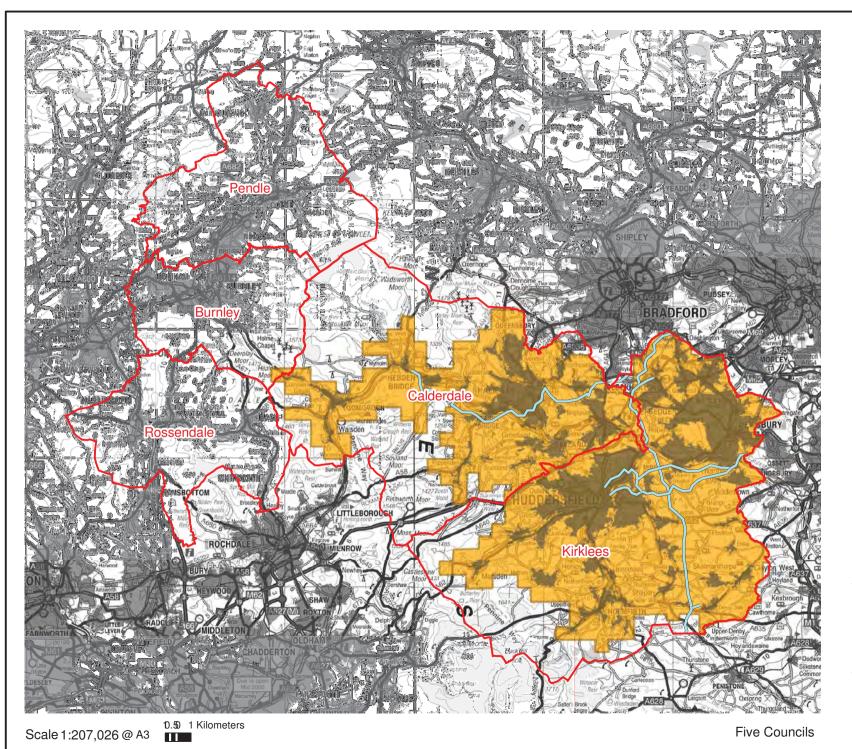
66kv 132kv

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FIGURE A16

ELECTRICITY DISTRIBUTION
NETWORK IN THE STUDY AREA



Gas Network
Urban Areas
Gas Grid

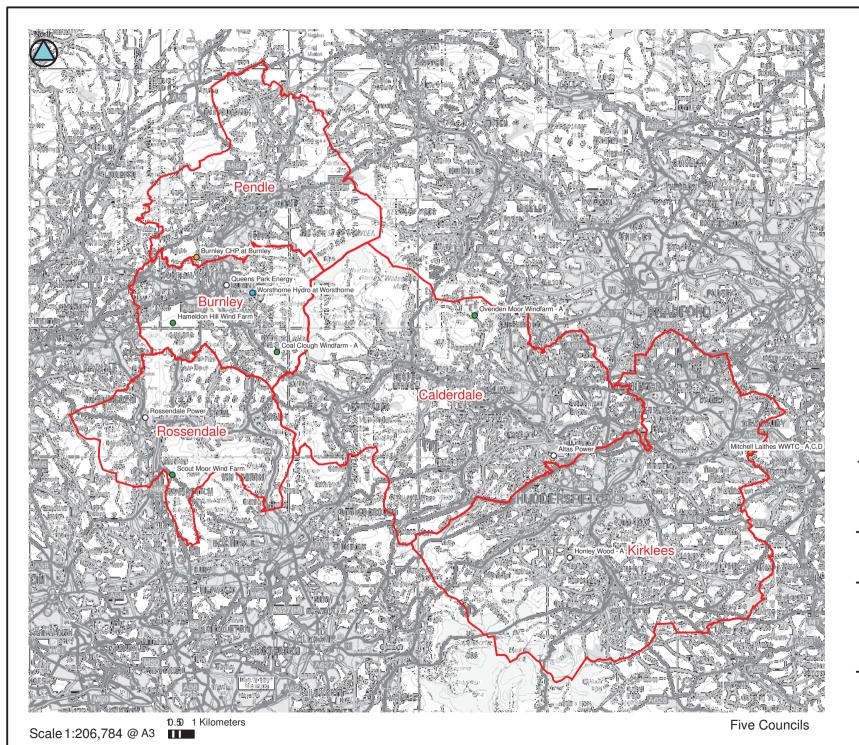
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© Northern Gas Network Limited



FIGURE A17

GAS NETWORK FOR KIRKLEES AND CALDERDALE ONLY



Station Types

O Landfill gas

Micro hydro

On-shore wind

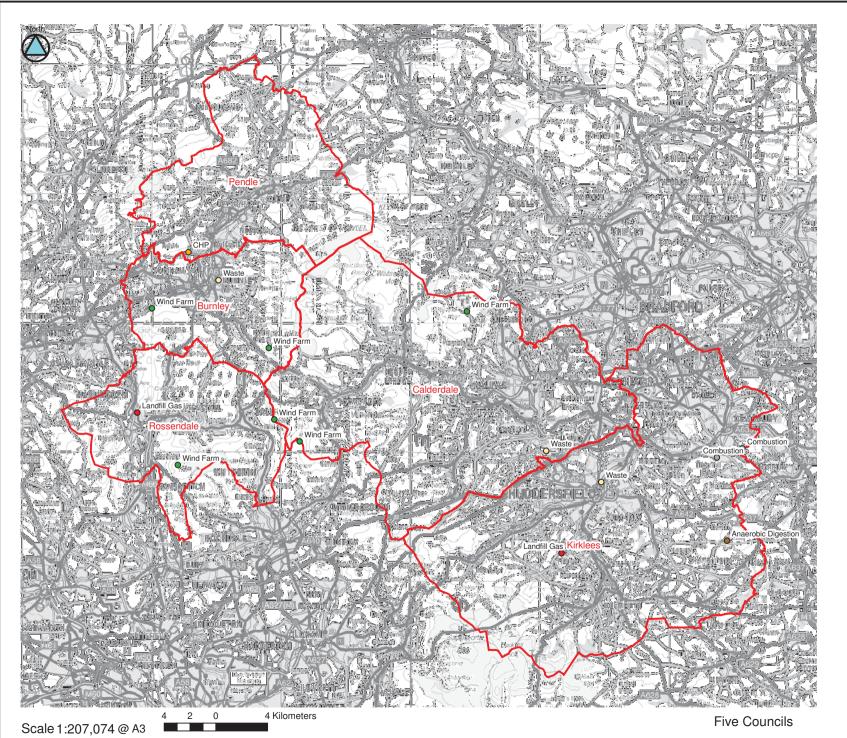
Sewage gas

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FIGURE A18

ROC Accredited Stations in the Study Area



Large Renewables

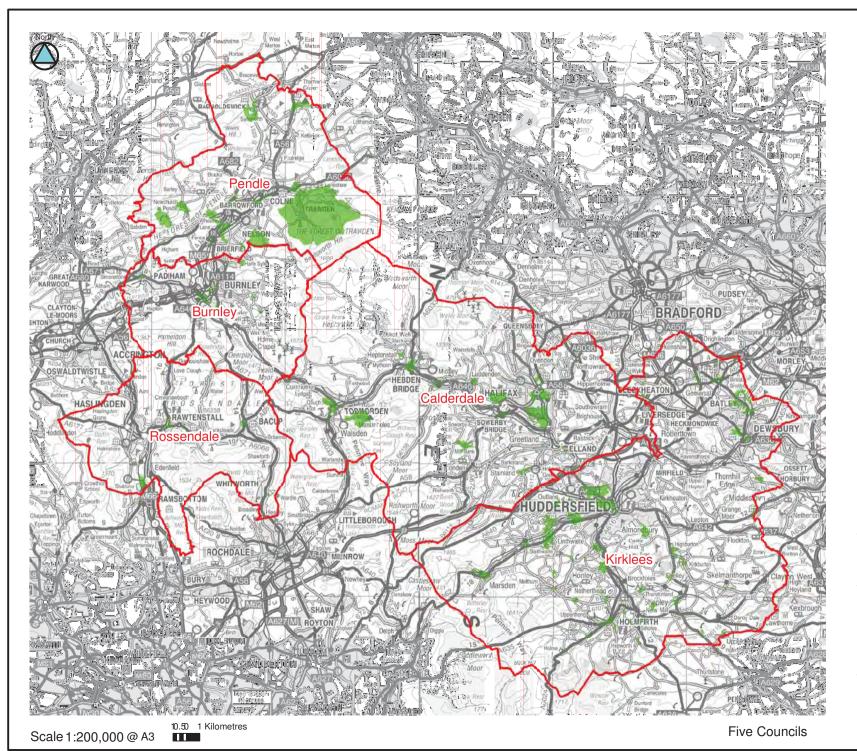
- Anaerobic Digestion
- CHP
- Combustion
- Landfill Gas
- Waste
- Wind Farm

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FIGURE A19

Large Renewable Schemes





Conservation Areas

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FIGURE A20

CONSERVATION AREAS