EcoServ-GIS Report

for Crawley Borough

January 2020

Contents   **Page**

Section 1:

Habitats

EcoServ-GIS

(version 3.3)

Basemap: habitat classes

Date: 24/01/2020

Key to map:

▭ (magenta outline)	Study Area
▭ (grey outline)	Study Area + buffer

Habitat Class

�" (green)	Cultivated/disturbed land (incl amenity)
▭ (pale green)	Gardens/Parks/Brownfield
▭ (khaki)	Grassland and marsh

▭ (light grey)	Infrastructure
▨ (hatched)	Mixed/other/uncertain
▨ (diagonal)	Unclassified
▭ (dark grey)	Urban (buildings)
▭ (blue)	Water
▭ (dark green)	Woodland and scrub

1:40,000
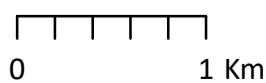
N

0   1 Km

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

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EcoServ-GIS

(version 3.3)

Basemap: habitat types

Date: 24/01/2020
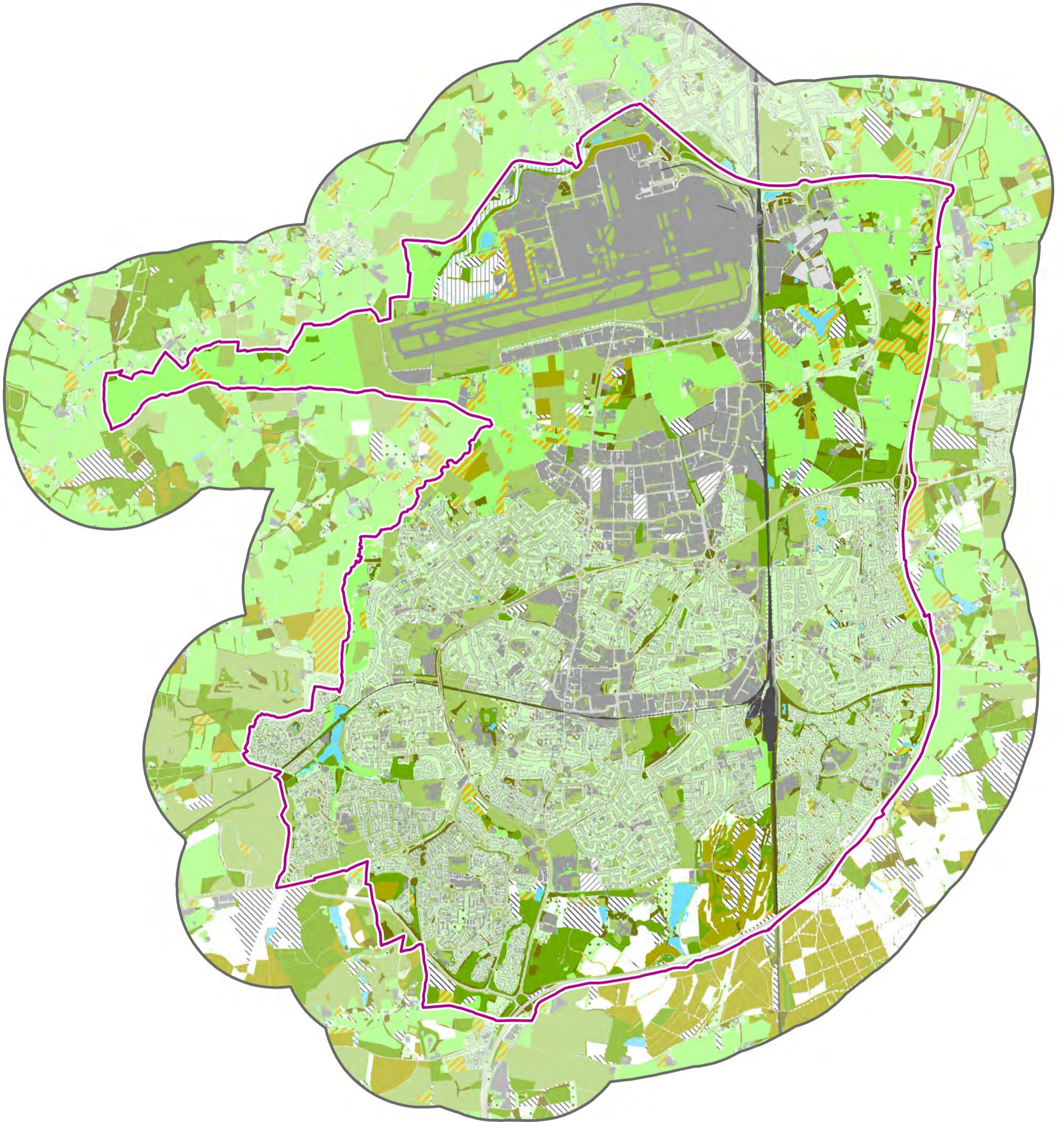
Key to map:

Study Area	Other
Study Area + buffer	Path
Habitat Type	Pavement
Built up areas	Railway
Cultivated/disturbed land (incl amenity)	Roads
Garden	Scrub
Gardens / Parks / Brownfield	Trees / Parkland
Grassland, improved	Uncertain agriculture
Grassland, marshy	Unclassified
Grassland, semi-natural	Water, fresh
Grassland, unknown	Woodland, broadleaved
Mixed habitats	

N

1:40,000

0   1.25 Km

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Section 2:

Output in Order of Ecosystem

EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Accessible Nature - Capacity

Key to map:

☐ Study Area

☐ Study Area + buffer

Capacity Scores
- 🟩 80 - 100
- 🟩 60 - 80
- 🟩 40 - 60
- 🟧 20 - 40
- 🟫 1 - 20

1:40,000

0   1 Km

N

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717

Accessible Nature occurs where greenspace or semi-natural habitats give health and well being benefits to people through regular access for walking, cycling or jogging.

METHODS: Accessible Nature Capacity values per habitat are inferred from available literature. Values are estimates of "perceived naturalness" from public surveys, via photo interpretation. High values represent areas where habitats have a higher "perceived naturalness" score at both the site, and local, scale. Therefore larger continuous blocks of more natural habitat types will have higher scores than smaller isolated sites of the same habitat type. Default local search neighbourhood values are used, but can be modified by the user. (Default = 300 m)

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Accessible Nature - Demand

Key to map:

☐ Study Area

☐ Study Area + buffer

Demand scores
- ■ 80 - 100
- ■ 60 - 80
- ■ 40 - 60
- ☐ 20 - 40
- ☐ 1 - 20

1:40,000

0   1 Km

N
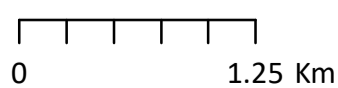
Sussex Wildlife Trust

Sussex Biodiversity Record Centre

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717
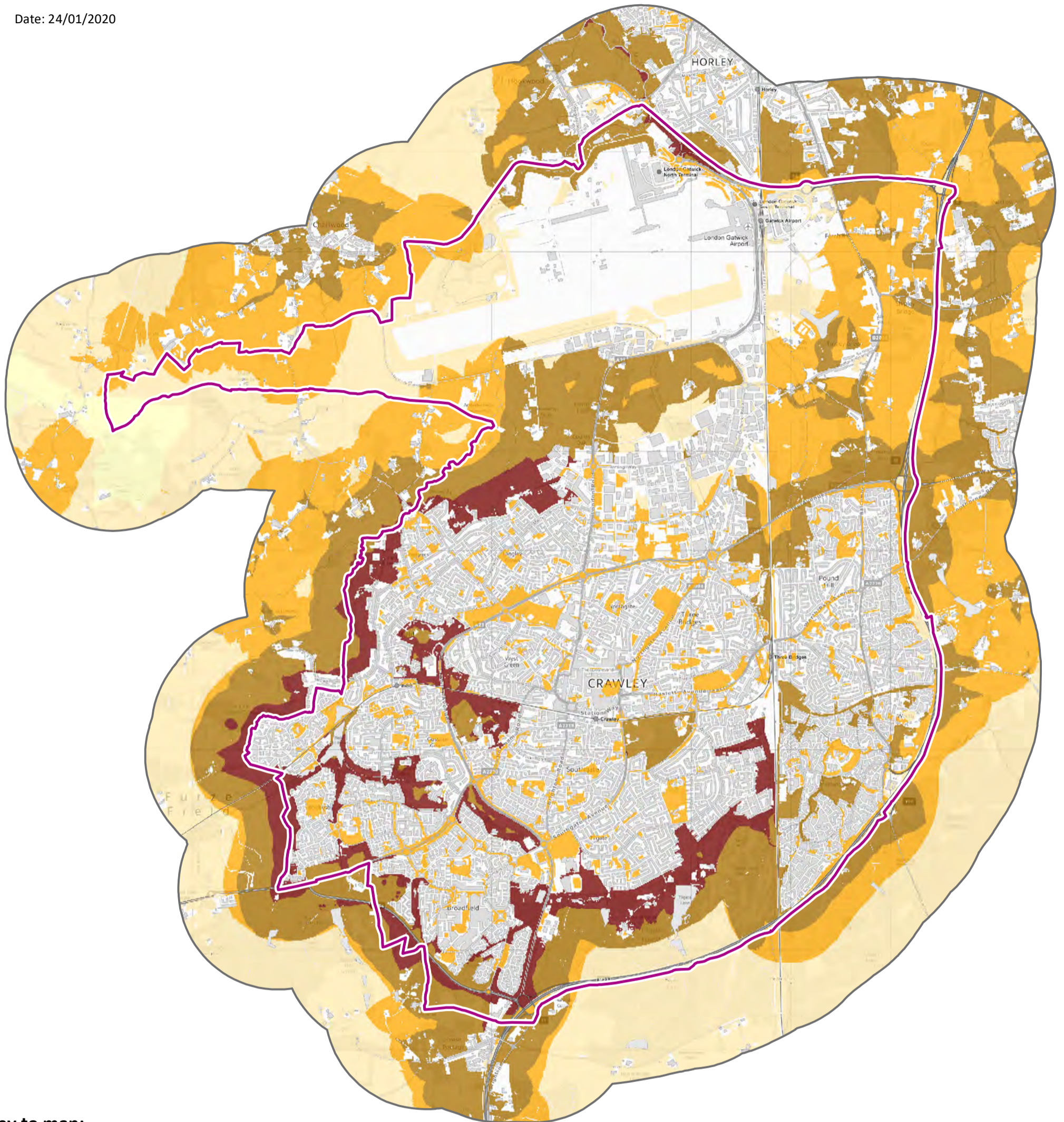
Accessible Nature occurs where greenspace or semi-natural habitats give health and well being benefits to people through regular access for walking, cycling or jogging.

METHODS: Demand is mapped based on population size, health scores, greenspace size and accessibility. The Demand score is based on several combined indicators: population density, health scores and estimated visitation likelihood, based on greenspace size and distance. High values represent areas where there is a higher predicted benefit to those people likely to use each accessible nature site. Default local search neighbourhood values are used, but can be modified by the user. Local = 600 m, Landscape = 2400 m, Region = 12800 m. Greenspace size thresholds are applied: Local > 0.1 ha, Landscape > 10 ha, Region > 100 ha

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
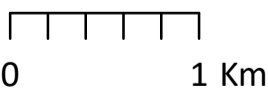
EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Accessible Nature - Service Benefitting Areas

Key to map:

— Study Area

☐ Study Area + buffer   1:40,000

Benefits to people
- ☐ A1. Highest
- ☐ A2. High
- ☐ A3. Intermediate
- ☐ A4. Low
- ☐ A5. Lowest

0 ——— 1 Km

N

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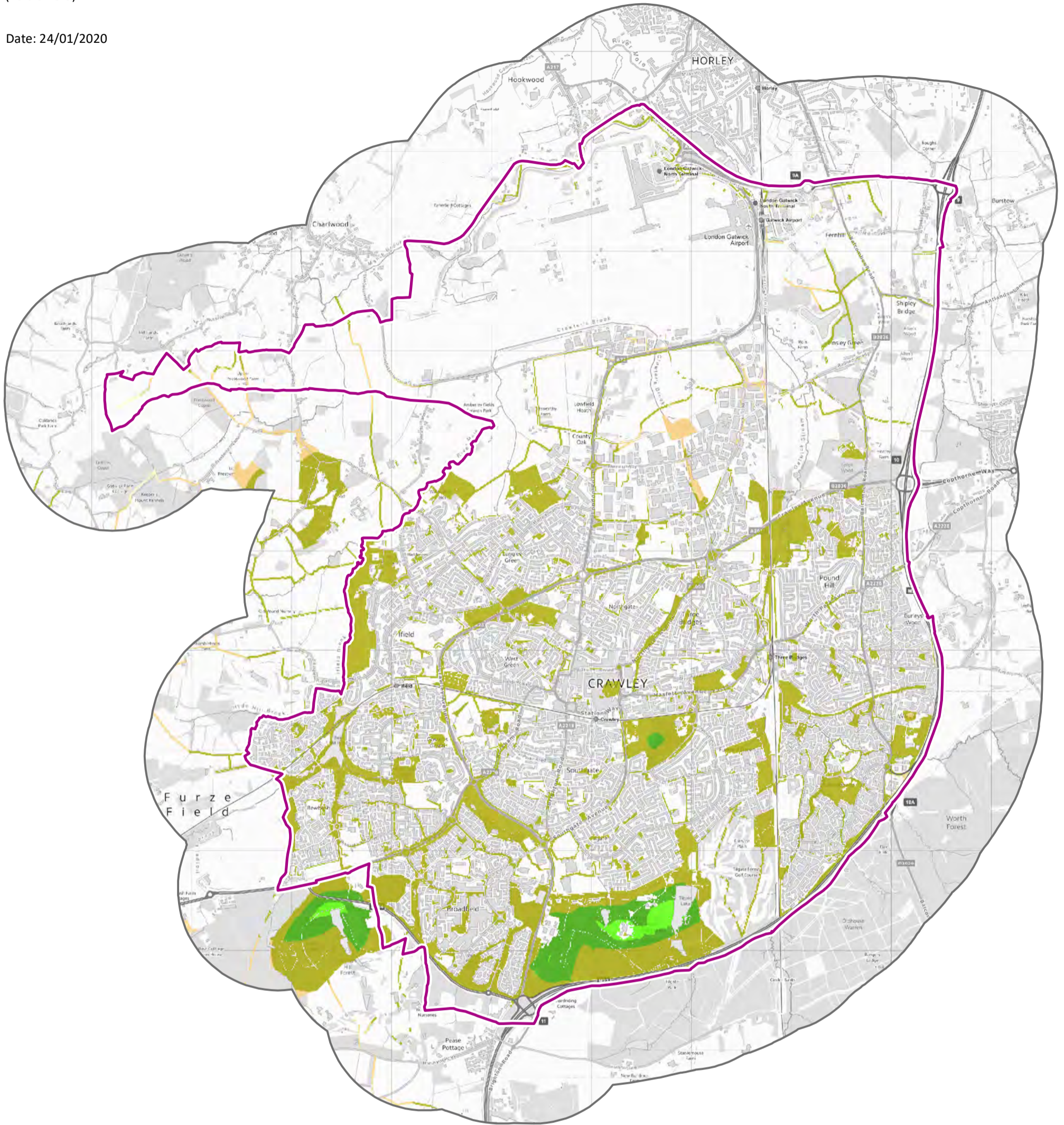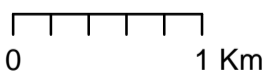|	Demand				
	Highest 5	4	3	2	Lowest 1
Capacity Highest: 5	Highest benefits				
4		High benefits			
3			Intermediate benefits		
2				Low benefits	
Lowest: 1					Lowest benefits

Accessible Nature occurs where greenspace or semi-natural habitats give health and well being benefits to people through regular access for walking, cycling or jogging.

METHODS: Capacity and Demand quintiles are overlaid to estimate the levels of benefits that may be delivered to people by the habitats currently present (see above graphic). Not all categories are always present. White space indicates no data or no service benefits.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Accessible Nature - Management Zones

EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Key to map:

◻ **Study Area** (magenta outline)
◻ **Study Area + buffer**

Management Zones

- A1. Protect
- A2. Protect / Maintain
- A3. Maintain
- A4. Improve
- A5. Maintain / Improve
- A6. Maintain / Assess
- A7. Assess
- A8. Change habitat type: Highest Demand
- A9. Change habitat type: High Demand
- B1. Create: Highest Demand
- B2. Create: High Demand

1:40,000

0   1 Km

N

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Capacity	Demand Highest 5	4	3	2	Lowest 1
Highest: 5	Protect key sites				
4		Protect or Maintain			
3			Maintain general resource		Maintain or Assess
2					
Lowest: 1	Improve condition		Maintain or Improve		Assess resource

Non-Greenspace: 0	Create new habitats
Greenspace: 0	Change habitat type

Accessible Nature occurs where greenspace or semi-natural habitats give health and well being benefits to people through regular access for walking, cycling or jogging.

METHODS: Capacity and Demand quintiles are overlaid to estimate the management interventions that could maintain or increase the benefits delivered to people (see above graphic). Not all categories are always present.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Accessible Nature - GI Assets

Key to map:

▭ Study Area

▭ Study Area + buffer

GI Assets

- 80 - 100
- 60 - 80
- 40 - 60
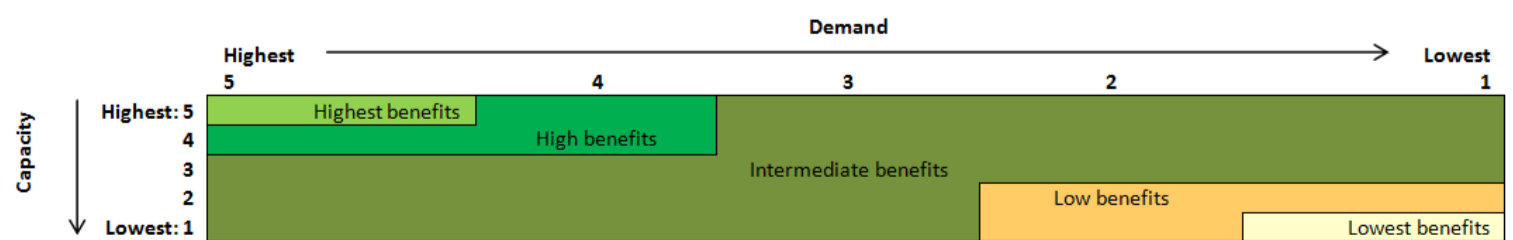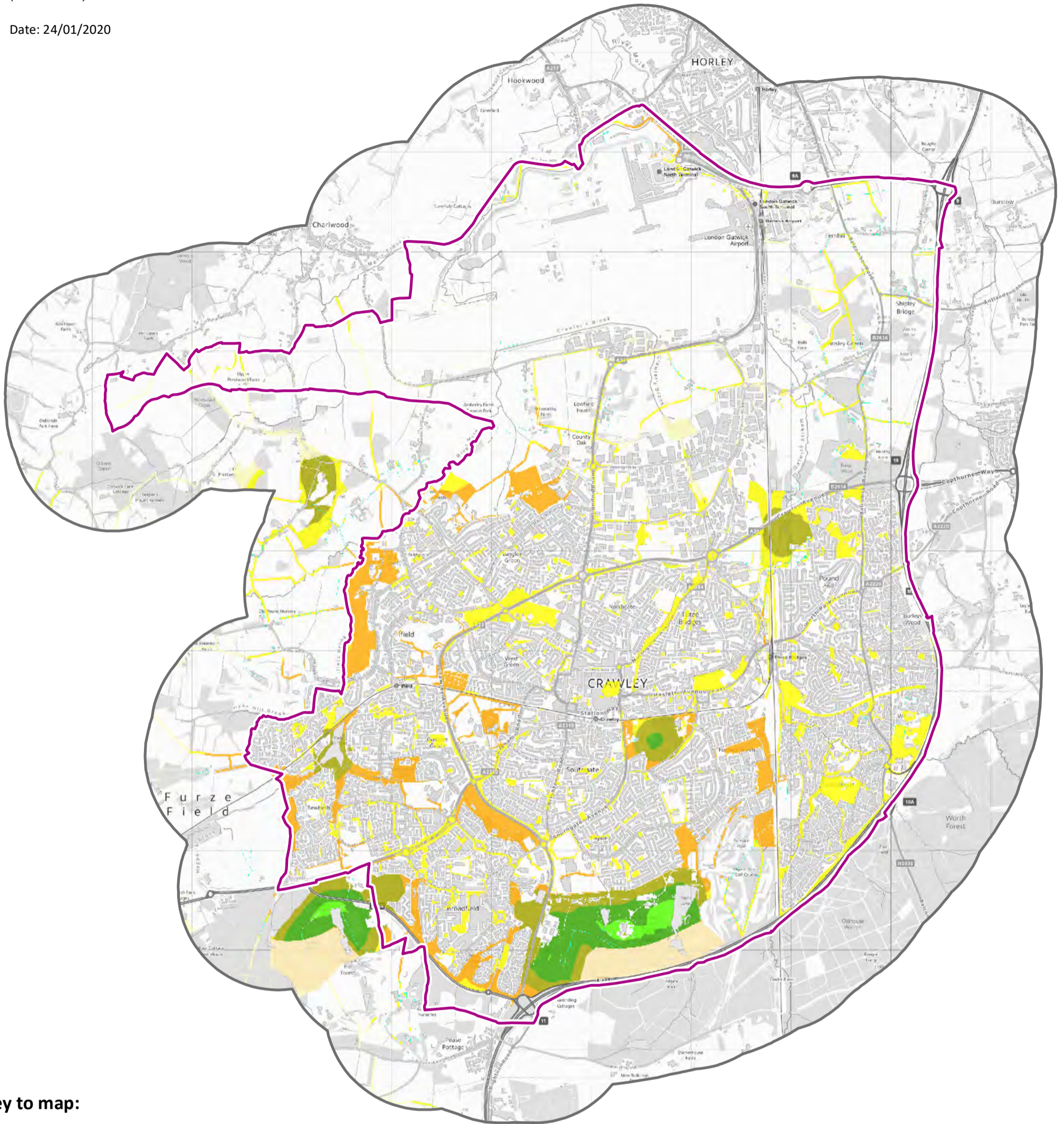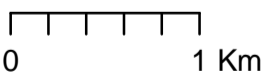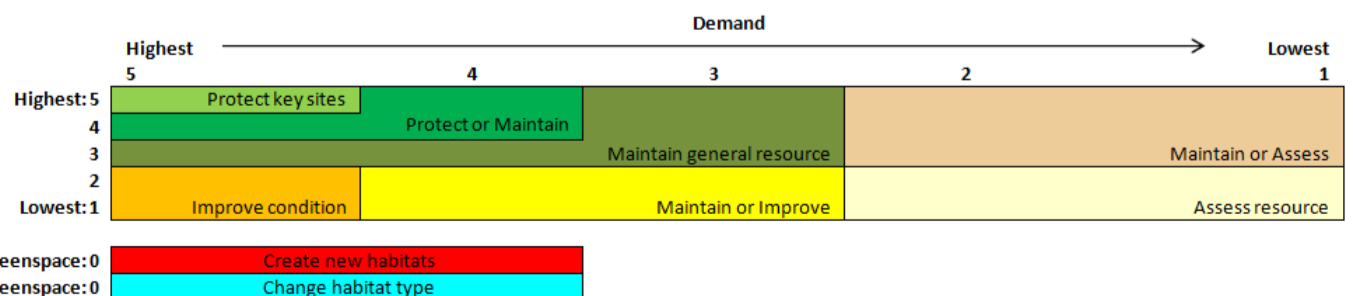- 20 - 40
- 1 - 20

1:40,000

N

0   1 Km

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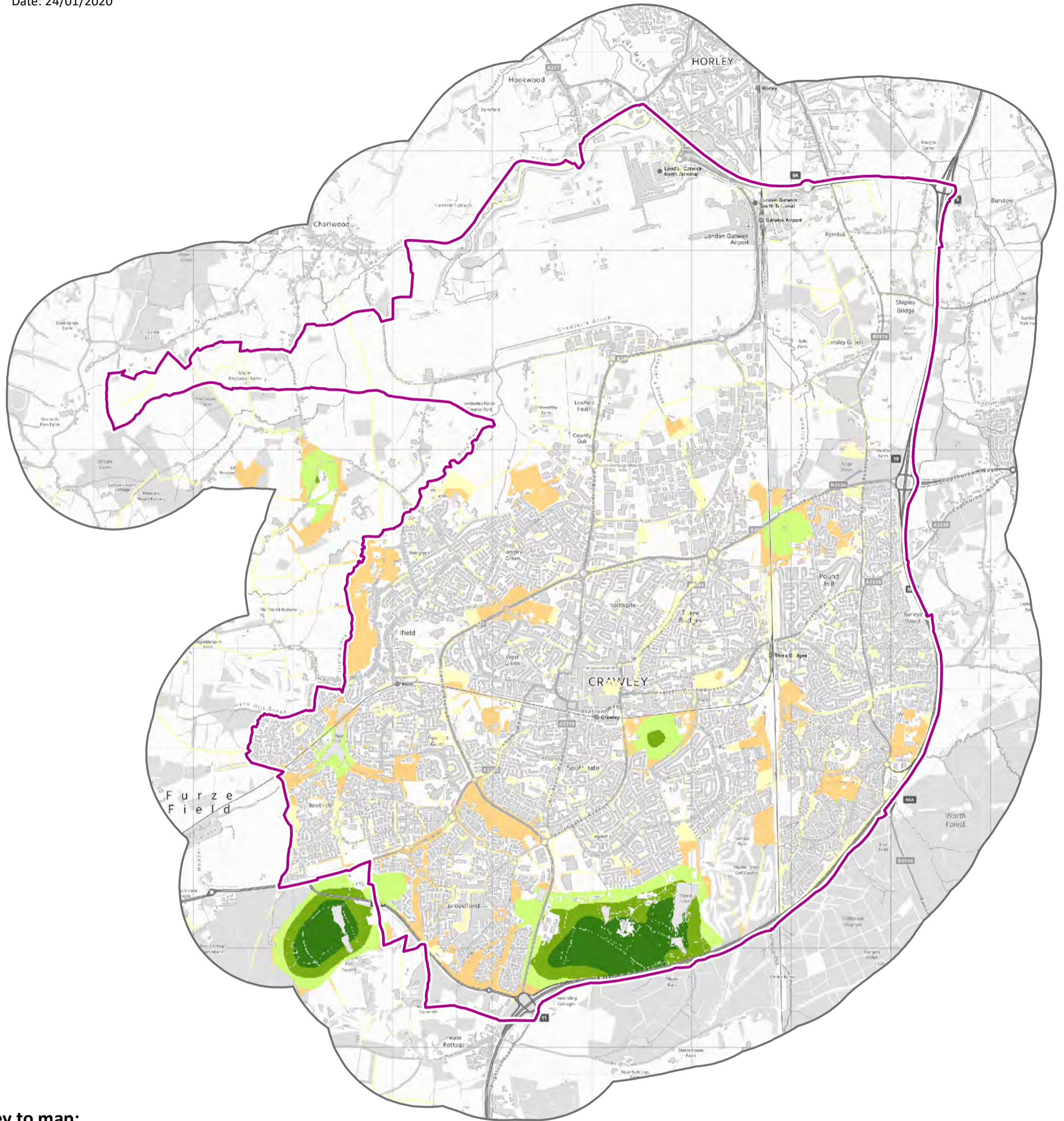
Accessible Nature occurs where greenspace or semi-natural habitats give health and well being benefits to people through regular access for walking, cycling or jogging.

METHODS: This map highlights those areas of existing natural, semi-natural, Greenspace or Green Infrastructure (GI) sites where there is predicted demand for a service as well as a level of capacity to deliver the service, Those areas with capacity, but with no demand, are ommitted from this map.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Air Purification - Capacity

Key to map:

▢ Study Area

▢ Study Area + buffer

Capacity Scores

- ■ 80 - 100
- ■ 60 - 80
- ■ 40 - 60
- ■ 20 - 40
- ■ 1 - 20

1:40,000

N

0   1 Km

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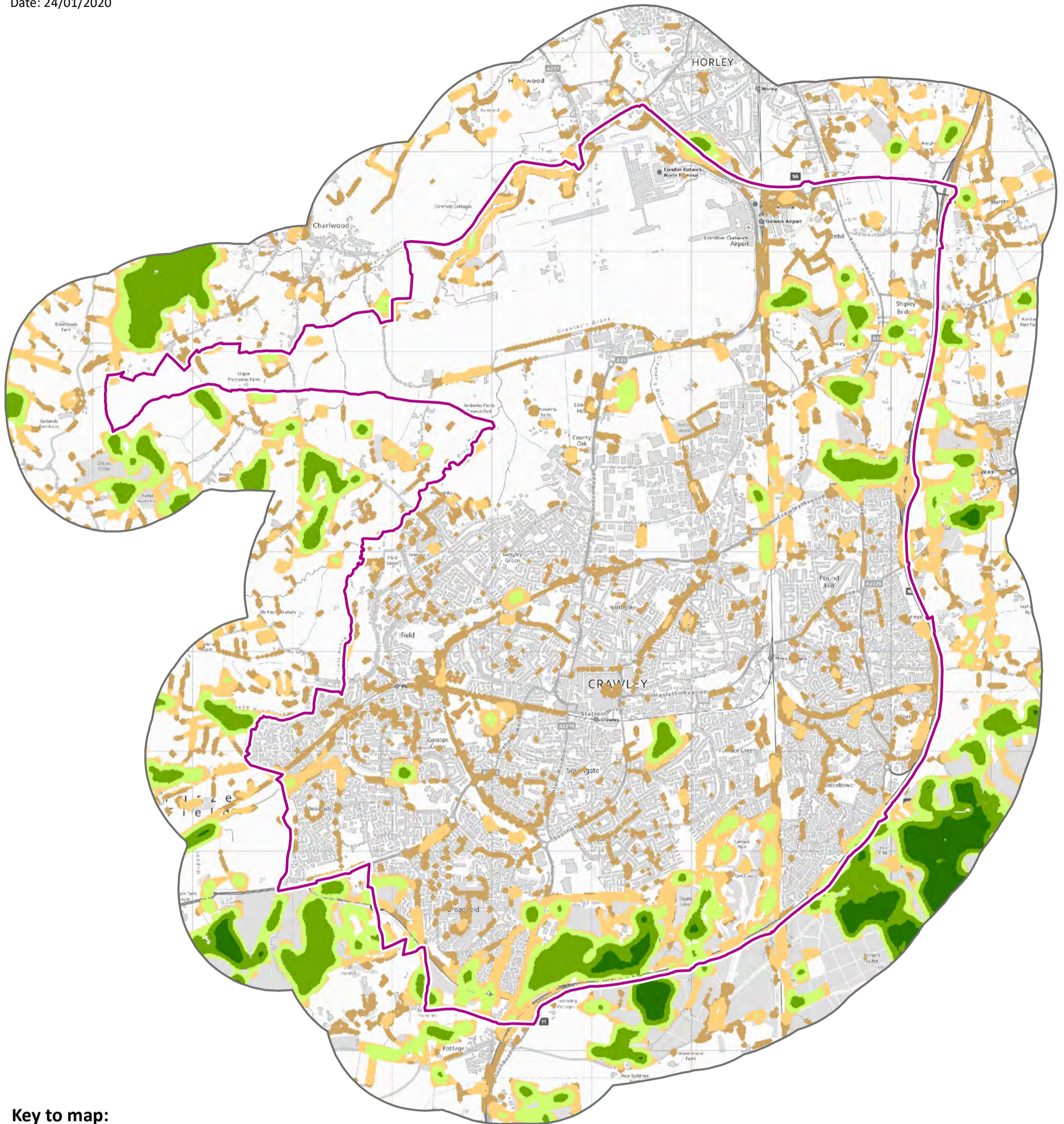
Air Purification occurs where habitats help to intercept or absorb airborne pollutants produced from road traffic.

METHODS: Air Purification values per habitat are inferred from available literature. Values are estimates of potential Air Purification ability per habitat type. High values represent areas where habitats have a predicted higher capacity to intercept or absorb airborne pollutants. This is based on habitat type and structure. Habitat age and management are not included. Values are calculated within a local search neighbourhood (Default = 200 m). Habitat capacity is assumed to be cummulative, scores are summed within the neighbourhood. Both higher scoring habitats, and wider / larger areas of habitat lead to larger mapped capacity scores.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
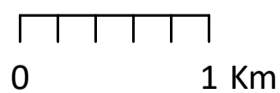
EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Air Purification - Demand

Key to map:

Study Area

Study Area + buffer

Demand scores

- 80 - 100
- 60 - 80
- 40 - 60
- 20 - 40
- 1 - 20

1:40,000

N

0   1 Km

Sussex Wildlife Trust

Sussex Biodiversity Record Centre
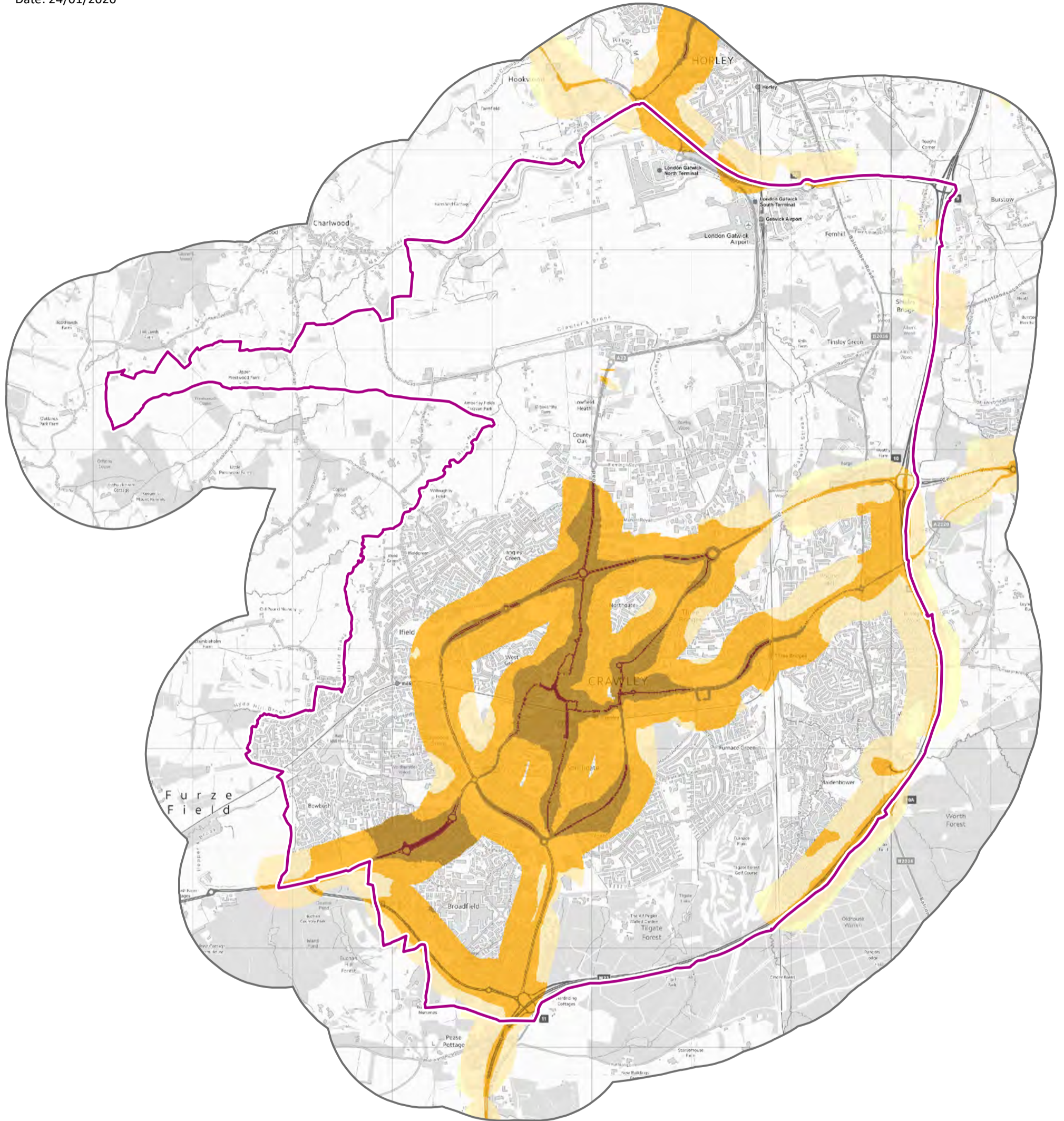
EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717

Air Purification occurs where habitats help to intercept or absorb airborne pollutants produced from road traffic.

METHODS: High values represent areas where there is a combination of higher population density, higher health deprivation scores and higher predicted air pollution levels based on proximity to roads. Threshold and search neighourhood values can be modified by the user. Default values are: Maximum air pollution occurence distance from roads = 400 m, Manmade surface cover = 400 m radius, Population density = 300 m, Health scores = 300 m

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Air Purification - Service Benefitting Areas

EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Key to map:

Study Area

Study Area + buffer

Benefits to people

A1. Highest

A2. High

A3. Intermediate

A4. Low

A5. Lowest

1:40,000

N

0 — 1 Km

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Capacity	Demand				
	Highest 5	4	3	2	Lowest 1
Highest: 5	Highest benefits				
4		High benefits			
3			Intermediate benefits		
2				Low benefits	
Lowest: 1					Lowest benefits

Air Purification occurs where habitats help to intercept or absorb airborne pollutants produced from road traffic.

METHODS: Capacity and Demand quintiles are overlaid to estimate the levels of benefits that may be delivered to people by the habitats currently present (see above graphic). Not all categories are always present. White space indicates no data or no service benefits.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
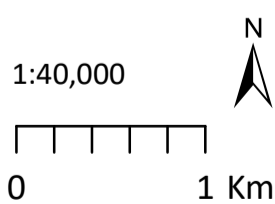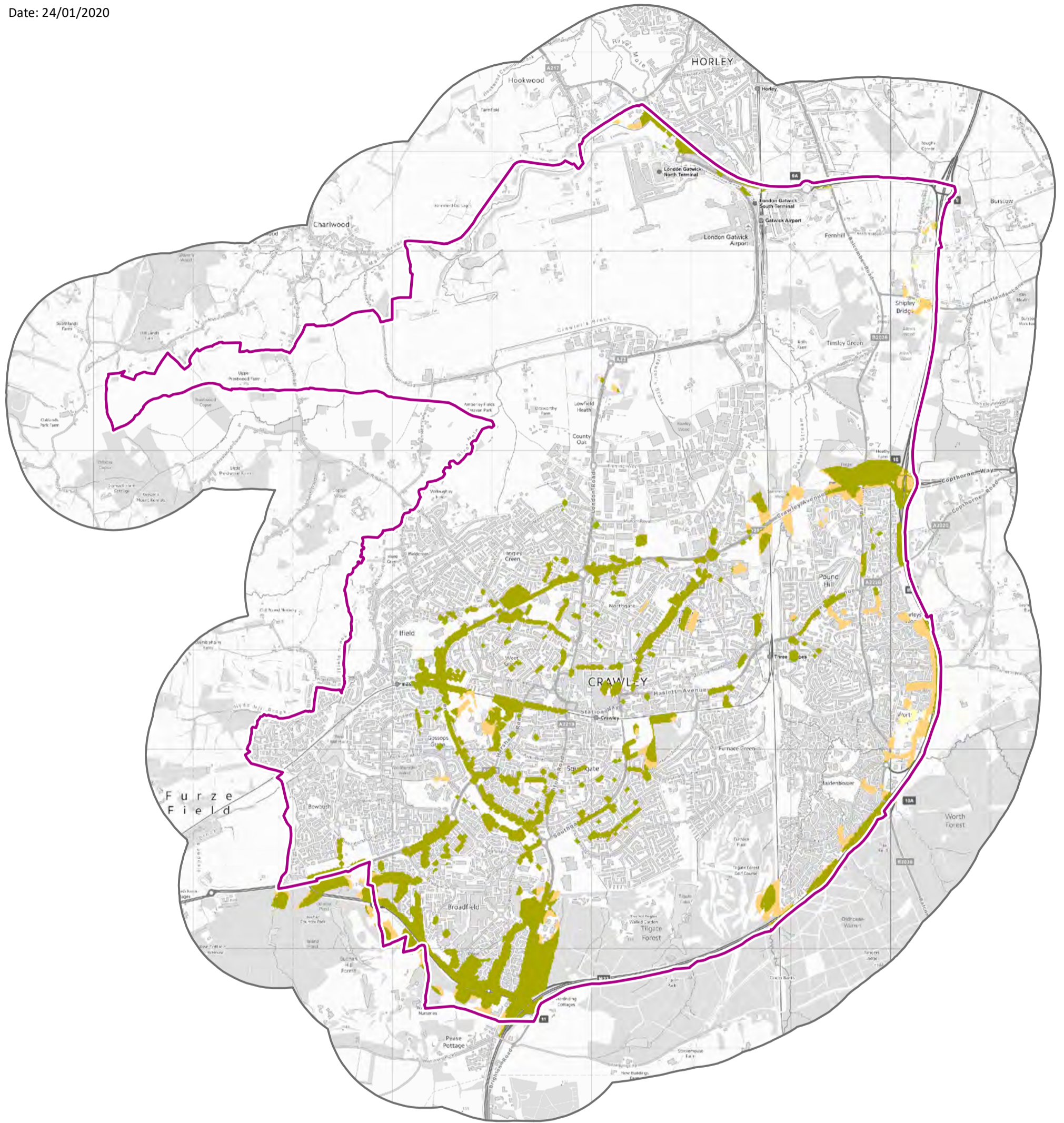
Air Purification - Management Zones

EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Key to map:

Study Area
Study Area + buffer

1:40,000

N

0   1 Km

Management Zones

A1. Protect
A2. Protect / Maintain
A3. Maintain
A4. Improve
A5. Maintain / Improve
A6. Maintain / Assess
A7. Assess
A8. Change habitat type: Highest Demand
A9. Change habitat type: High Demand
B1. Create: Highest Demand
B2. Create: High Demand

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	Demand				
	Highest 5	4	3	2	Lowest 1
Highest: 5	Protect key sites				
4		Protect or Maintain			
3			Maintain general resource		Maintain or Assess
2					
Lowest: 1	Improve condition		Maintain or Improve		Assess resource
Non-Greenspace: 0	Create new habitats				
Greenspace: 0	Change habitat type				

Capacity

Air Purification occurs where habitats help to intercept or absorb airborne pollutants produced from road traffic.

METHODS: Capacity and Demand quintiles are overlaid to estimate the management interventions that could maintain or increase the benefits delivered to people (see above graphic). Not all categories are always present.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
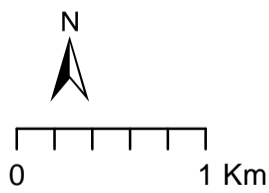
EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Air Purification - GI Assets
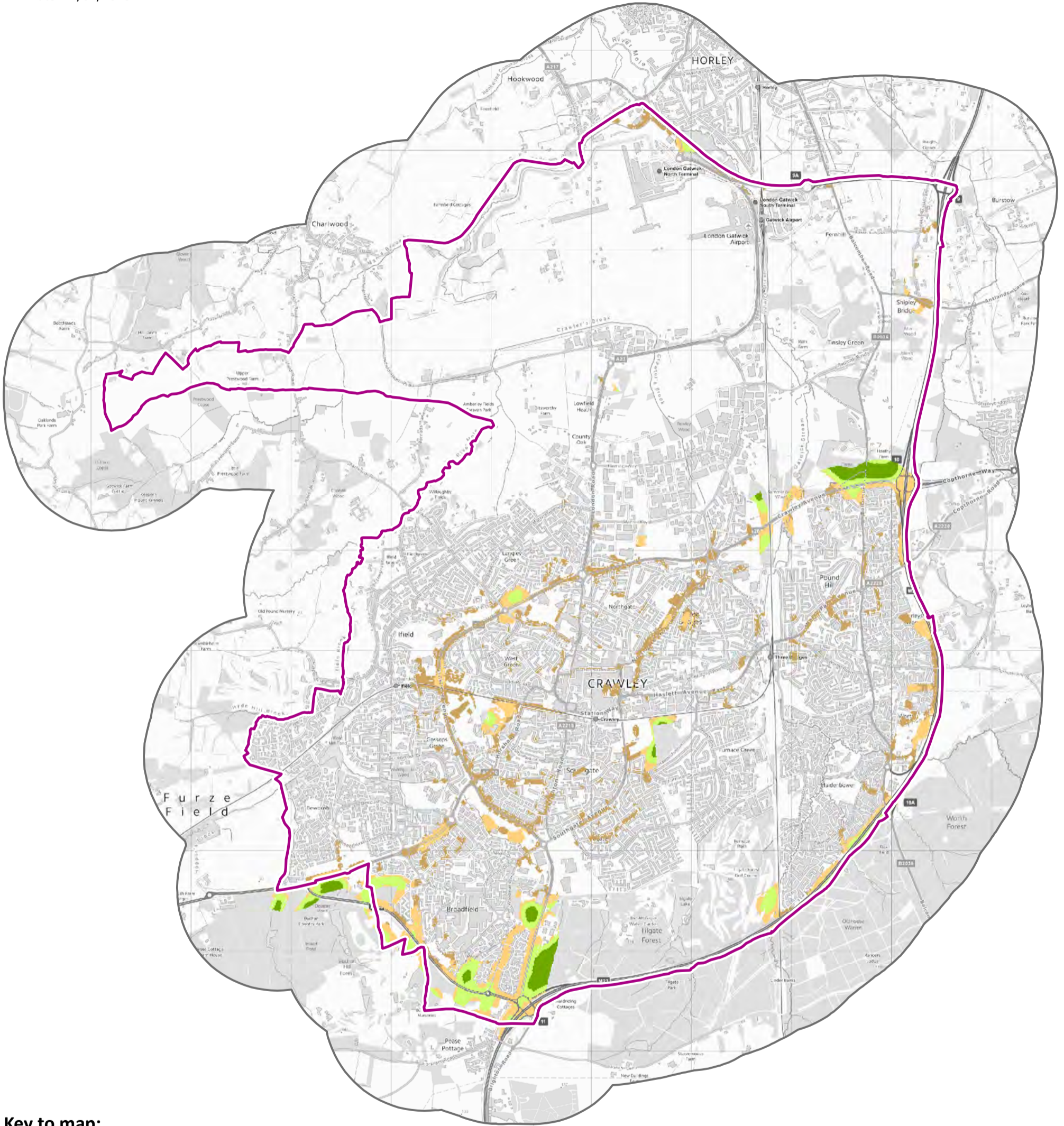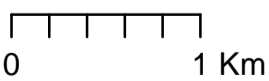

Key to map:

⬛ Study Area

⬜ Study Area + buffer

GI Assets

⬛ 80 - 100

⬛ 60 - 80

🟩 40 - 60

🟧 20 - 40

🟫 1 - 20

1:40,000

N

0   1 Km

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Air Purification occurs where habitats help to intercept or absorb airborne pollutants produced from road traffic.

METHODS: This map highlights those areas of existing natural, semi-natural, Greenspace or Green Infrastructure (GI) sites where there is predicted demand for a service as well as a level of capacity to deliver the service, Those areas with capacity, but with no demand, are ommitted from this map.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
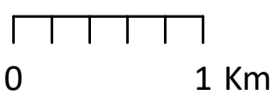
EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Carbon Storage - Capacity

Key to map:

Study Area

Study Area + buffer

Capacity Scores

80 - 100
60 - 80
40 - 60
20 - 40
1 - 20

1:40,000

N

0   1 Km

Carbon storage occurs in vegetation and soil

METHOD: This toolkit maps the estimated amount of carbon stored in different ecosystem or habitat types. Carbon storage values are taken from available literature. Values are estimates of typical storage levels per habitat type. Soil type is assumed to be typical of the mapped habitat. Soil types are not separately mapped from soil data. Habitat age and management is not considered. High values represent high carbon storage levels per unit area. Carbon storage values are calculated from the data used within the attribute link table in the BaseMap models. Carbon storage values may link to mapped habitat types at different hierarchy levels (Phase 1 Habitat, Broad Habitat or Habitat Class)

LIMITATIONS: Care should be taken in map interpretation for certain habitats where it is known that certain soil types occur, such as deep peat, or where plantation woodlands or improved grasslands occur on deep peat. In such situations the capacity will reflect the current dominant habitat type. Running an alternative scenario analysis with such habitat restored or converted to blanket bog or marshy grassland would show the higher storage capacity in such habitats. EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Carbon Storage - Demand

Key to map:

- Study Area
- Study Area + buffer

Demand scores
100

1:40,000

N

0   1 Km
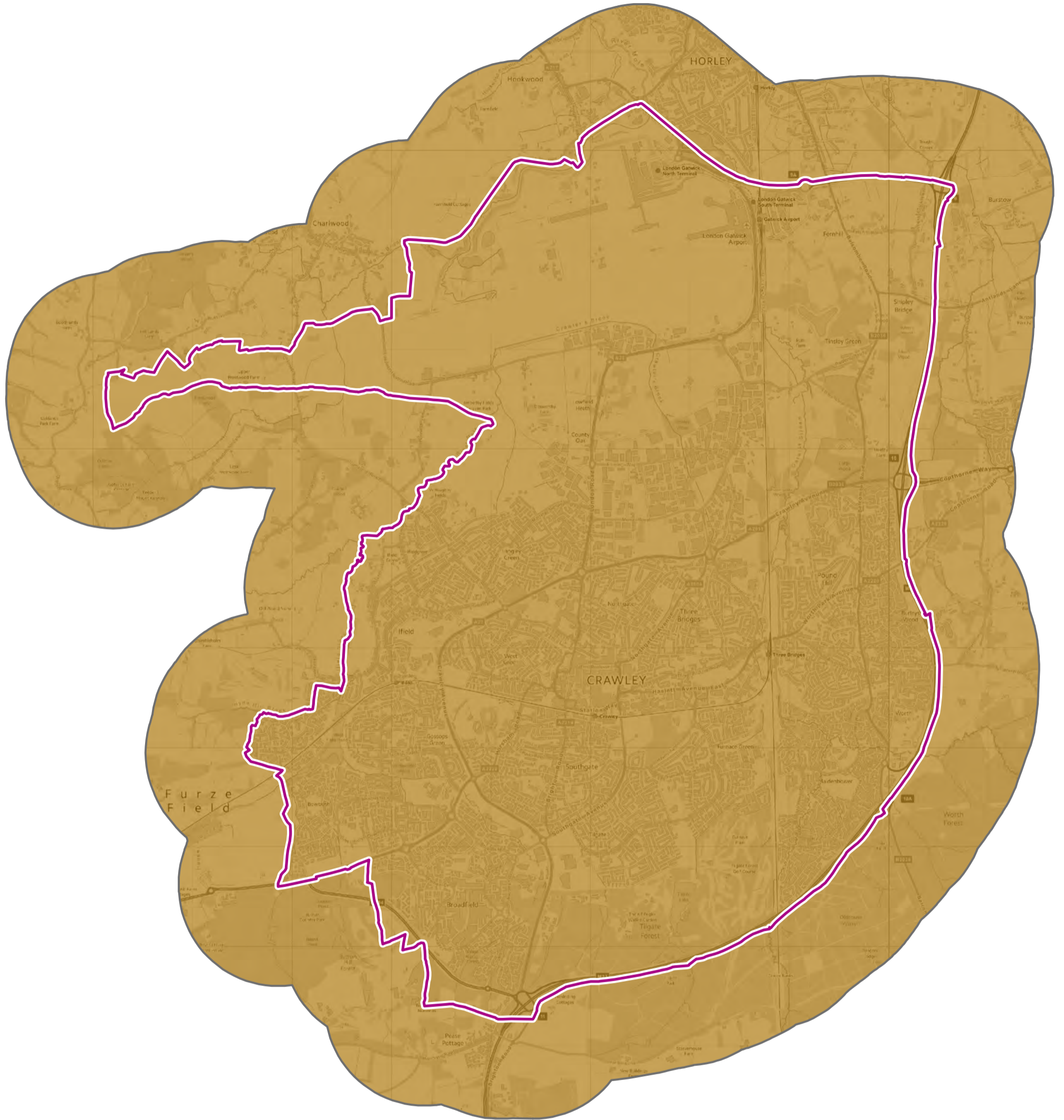
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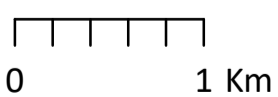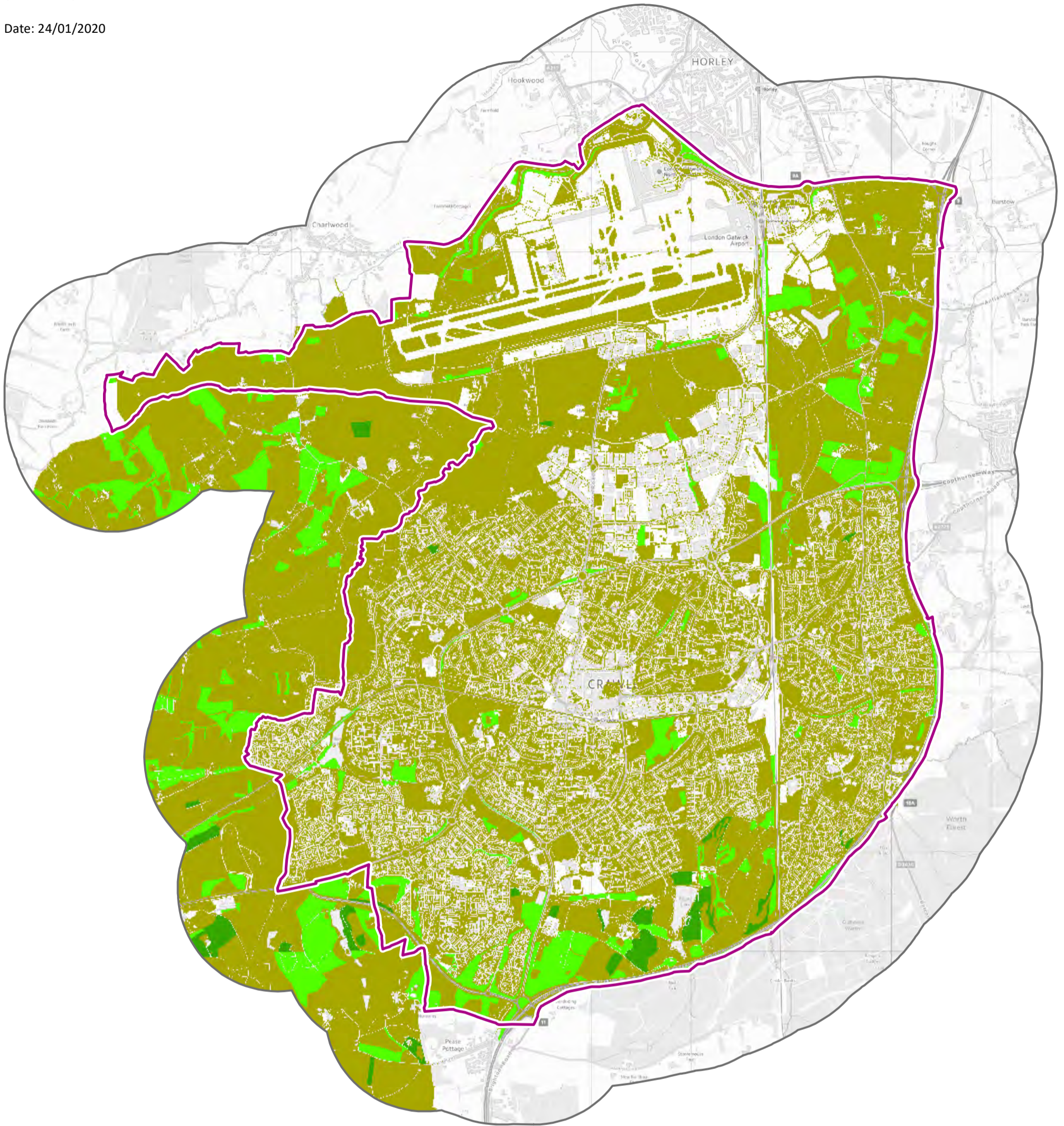
Carbon storage occurs in vegetation and soil.

METHODS: This toolkit maps the estimated amount of carbon stored in different ecosystem or habitat types. Because the benefits of carbon storage are global, all areas are mapped as high demand.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
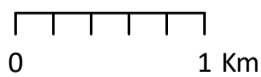
Carbon Storage - Service Benefitting Areas

EcoServ-GIS

(version 3.3)

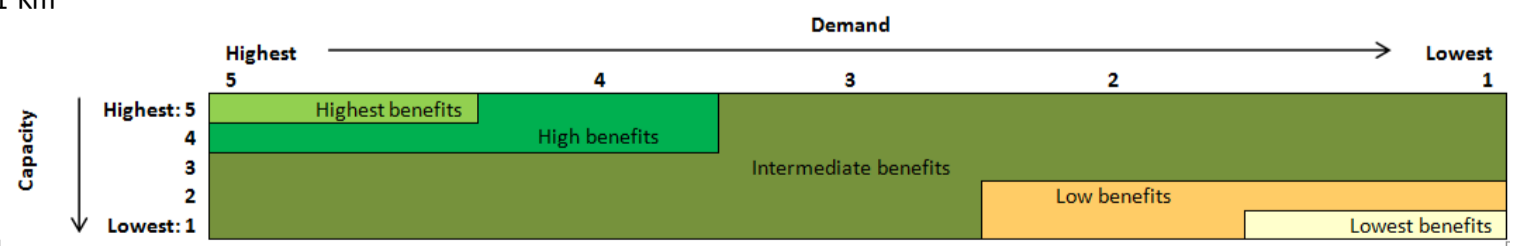Date: 24/01/2020

Key to map:

▢ Study Area
▢ Study Area + buffer

1:40,000

N

0   1 Km

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Benefits to people

▢ A1. Highest
▢ A2. High
▢ A3. Intermediate
▢ A4. Low
▢ A5. Lowest

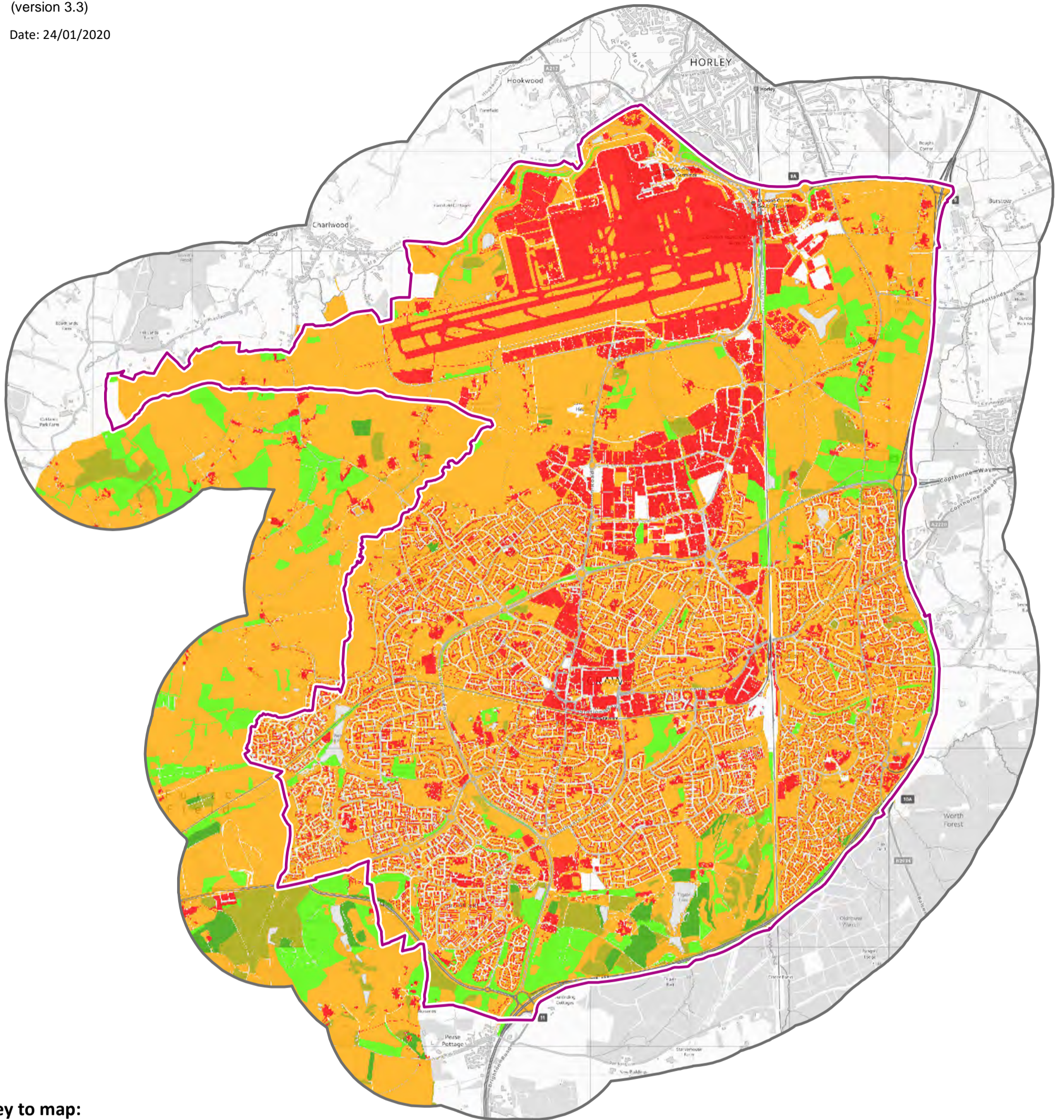|	Demand				
	Highest 5	4	3	2	Lowest 1
Highest: 5	Highest benefits				
4		High benefits			
Capacity 3			Intermediate benefits		
2				Low benefits	
Lowest: 1					Lowest benefits

Areas where people benefit from carbon storage in vegetation and soil.

METHODS: Capacity and Demand quintiles are overlaid to estimate the levels of benefits that may be delivered to people by the habitats currently present (see above graphic). Not all categories are always present. White space indicates no data or no service benefits.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Carbon Storage - Management Zones

EcoServ-GIS
(version 3.3)
Date: 24/01/2020

Key to map:

- ▭ (magenta outline) Study Area
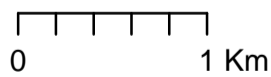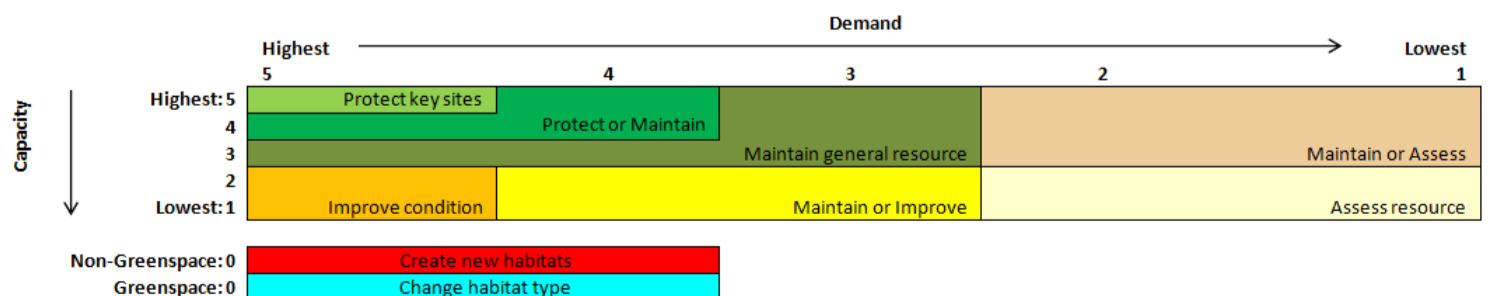- ▭ (grey outline) Study Area + buffer

Management Zones

- A1. Protect
- A2. Protect / Maintain
- A3. Maintain
- A4. Improve
- A5. Maintain / Improve
- A6. Maintain / Assess
- A7. Assess
- A8. Change habitat type: Highest Demand
- A9. Change habitat type: High Demand
- B1. Create: Highest Demand
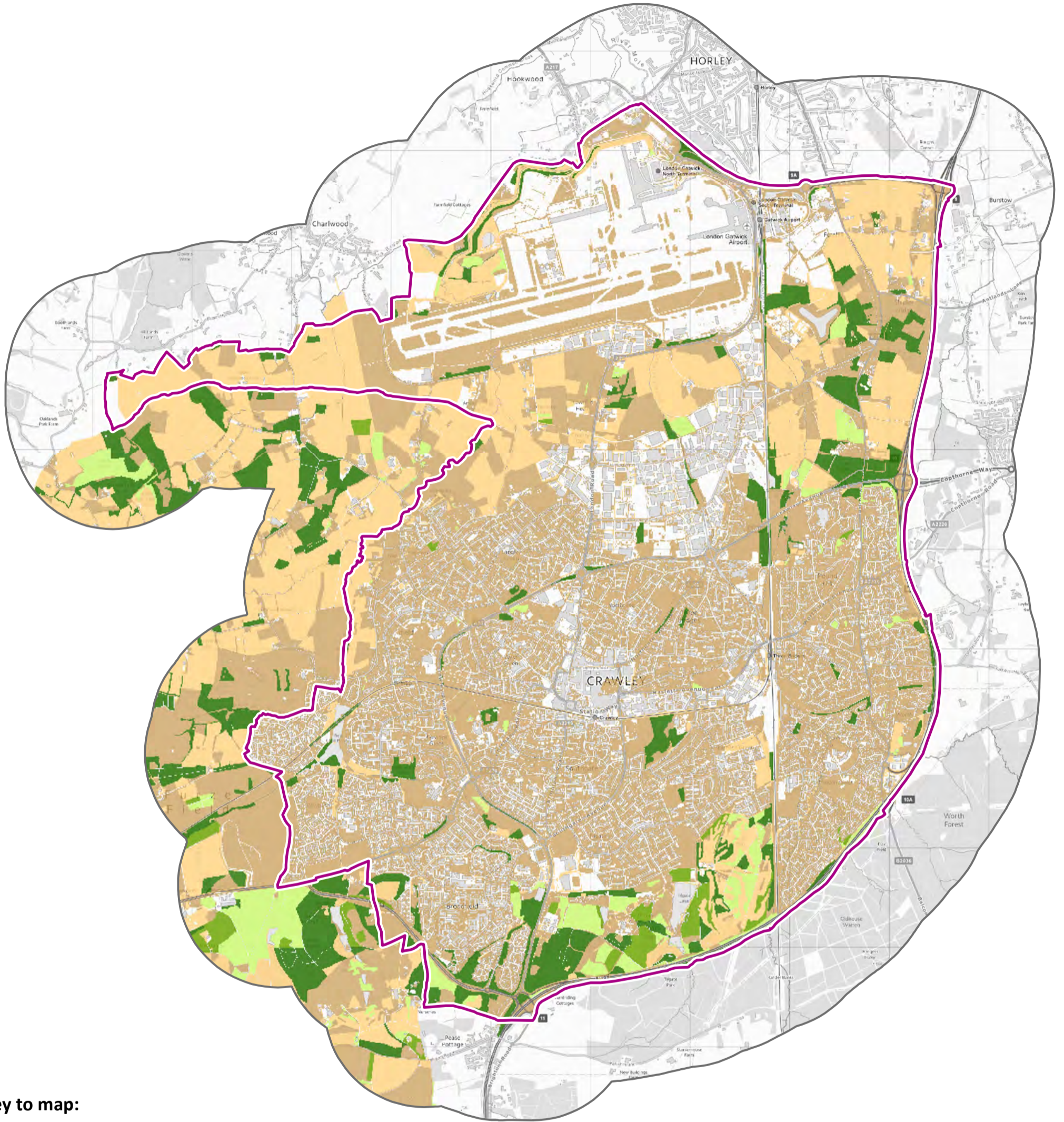- B2. Create: High Demand

1:40,000

0 _____ 1 Km

N

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

	Demand				
	Highest 5	4	3	2	Lowest 1
Capacity Highest: 5	Protect key sites				Maintain or Assess
4		Protect or Maintain			
3			Maintain general resource		
2					Assess resource
Lowest: 1	Improve condition		Maintain or Improve		

Non-Greenspace: 0	Create new habitats
Greenspace: 0	Change habitat type

Areas where people benefit from carbon storage in vegetation and soil.

METHODS: Capacity and Demand quintiles are overlaid to estimate the management interventions that could maintain or increase the benefits delivered to people (see above graphic). Not all categories are always present.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
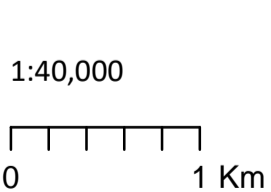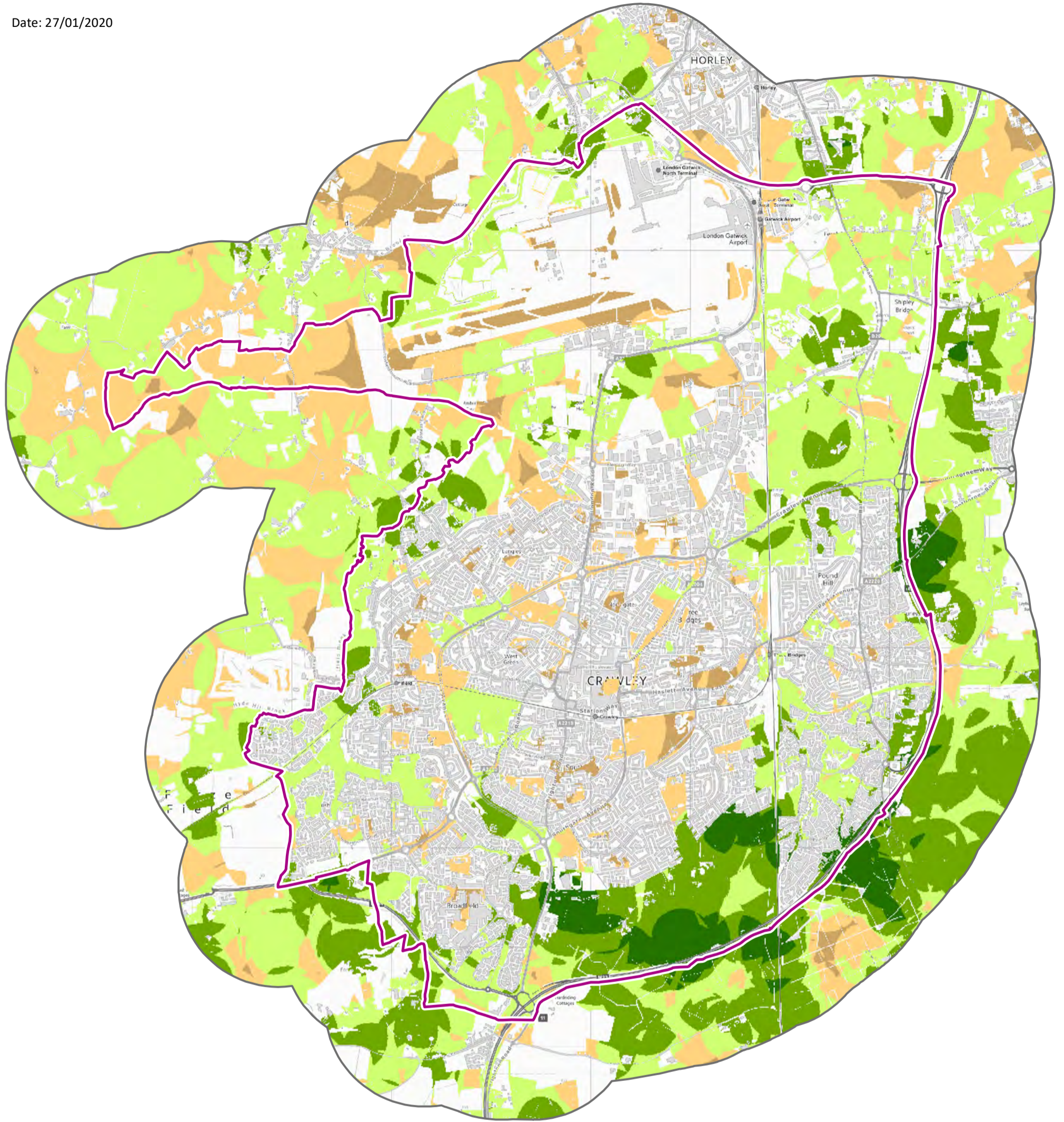
EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Carbon Storage - GI Assets

Key to map:

▭ Study Area
▭ Study Area + buffer

GI Assets

▮ 80 - 100
▮ 60 - 80
▮ 40 - 60
▮ 20 - 40
▮ 1 - 20

1:40,000

0 _____ 1 Km

N

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Sussex Biodiversity Record Centre

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Carbon storage occurs in vegetation and soil.

METHODS: This toolkit maps the estimated amount of carbon stored in different ecosystem or habitat types. This map highlights those areas of existing natural, semi-natural, Greenspace or Green Infrastructure (GI) sites where there is predicted demand for a service as well as a level of capacity to deliver the service, Those areas with capacity, but with no demand, are ommitted from this map.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
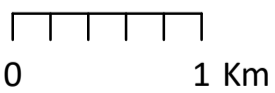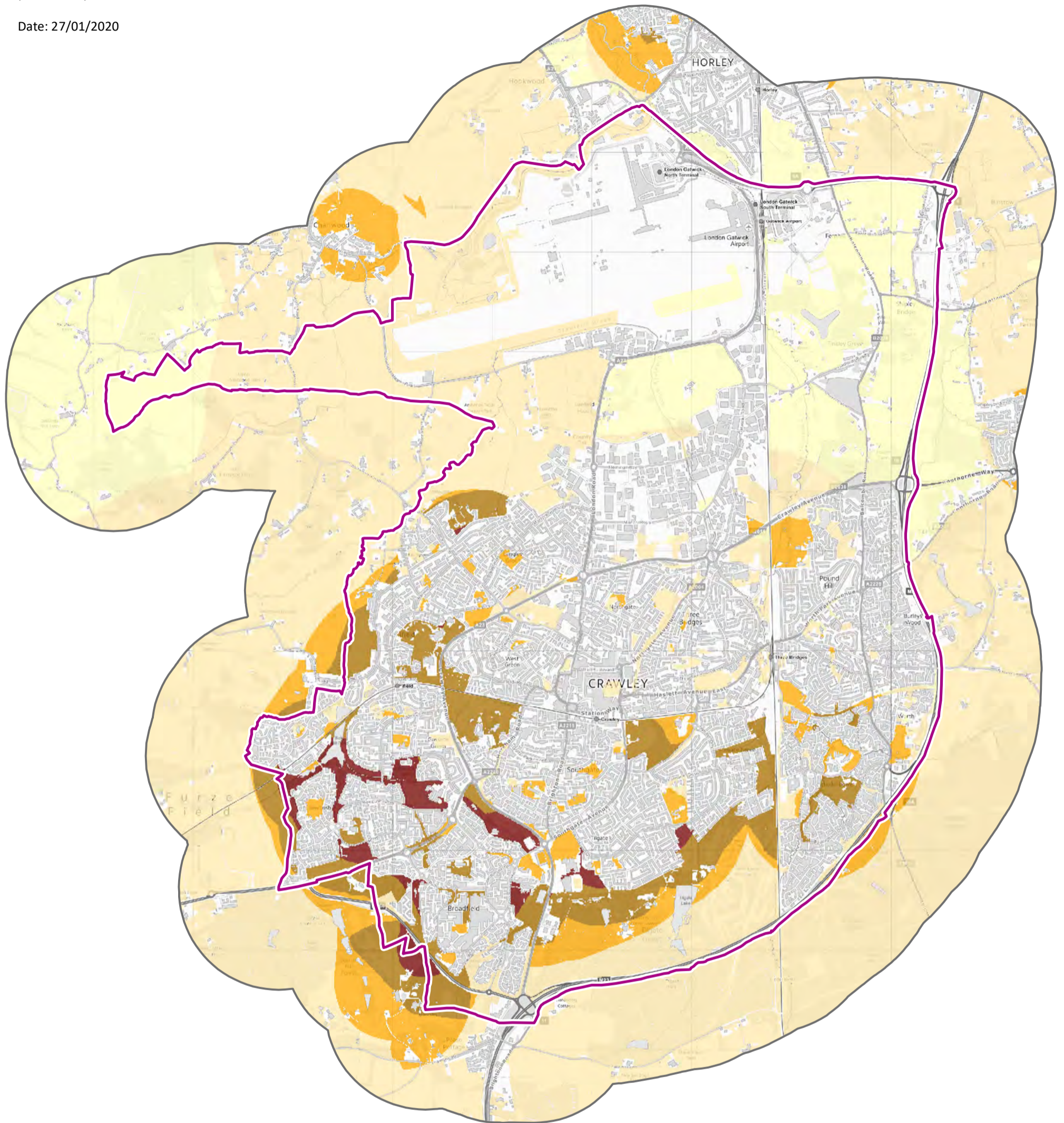
Education and Knowledge - Capacity

EcoServ-GIS
(version 3.3)

Date: 27/01/2020

Key to map:

▭ Study Area

▭ Study Area + buffer

Capacity Scores

■ 80 - 100
■ 60 - 80
■ 40 - 60
■ 20 - 40
■ 1 - 20

1:40,000

N

0   1 Km

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

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Areas where young people can benefit from the education and knowledge opportunities of diverse semi-natural habitats.

METHODS: Education and knowledge capacity is mapped by illustrating the number of broad habitat types that occur in a nearby local area (5 mins walk / 300 m). This map reflects the range of habitat types that are available in a local area for formal or informal study. Areas with a mix of habitats are assumed to offer opportunities for study, reflection and knowledge. The "unrestricted" capacity is shown, for areas which are likely to be accessed by the public. Thresholds are applied to limit the area of mapped capacity. Defaults are applied, but can be varied with custom settings. Local search distance = 300 m, Minimum education site size = 5,000 m (0.5 ha), Minimum number of Broad Habitats present = 2

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Education and Knowledge - Demand

EcoServ-GIS
(version 3.3)

Date: 27/01/2020

Key to map:

▭ Study Area

▭ Study Area + buffer

Demand scores
- ▮ 80 - 100
- ▮ 60 - 80
- ▮ 40 - 60
- ▯ 20 - 40
- ▯ 1 - 20

1:40,000

N

0   1 Km
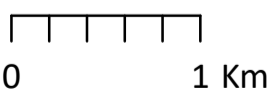
EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnance Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717
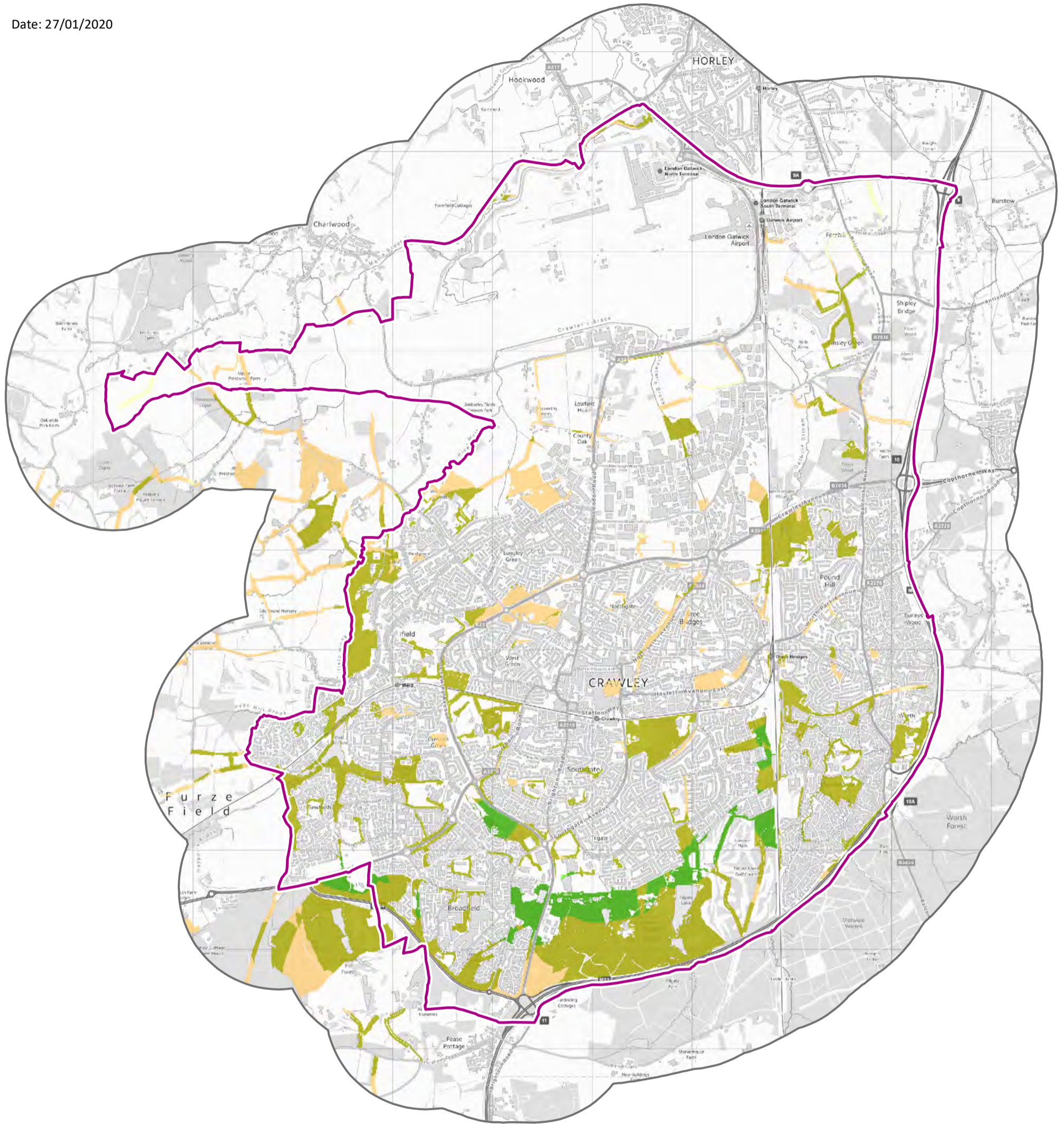
Areas where young people can benefit from the education and knowledge opportunities of diverse semi-natural habitats.

METHODS: Education and knowledge demand is mapped by combining two social indicators: the number of young people that live nearby, and the distance to nearby schools. Analysis examines greenspace sites at three spatial scales. Analysis defaults are: Young people <15yrs, Local scale: 600 m, Landscape scale: 3000 m. Region scale: 8000 m. Population thresholds are applied to remove areas of very sparse population. Defaults are: Local scale: > 50, Landscape scale: > 500, Region scale: > 1000

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
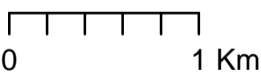
EcoServ-GIS

(version 3.3)

Date: 27/01/2020

# Education and Knowledge - Service Benefitting Areas

Key to map:

▭ Study Area

▭ Study Area + buffer

Benefits to people

▭ A1. Highest
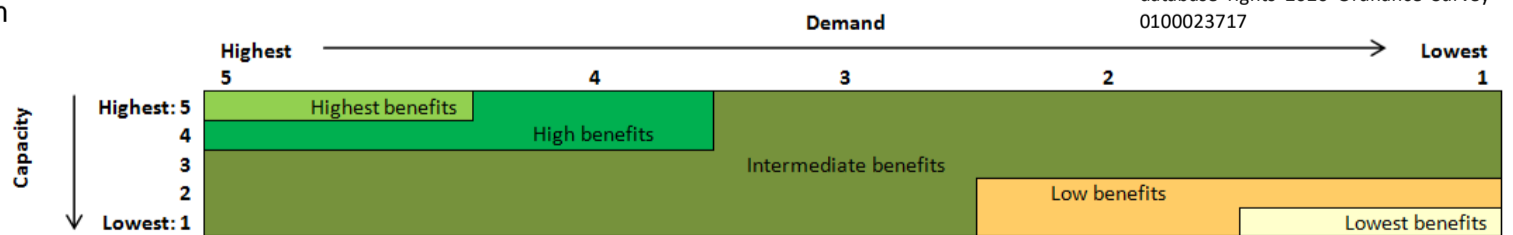
▭ A2. High

▭ A3. Intermediate

▭ A4. Low

▭ A5. Lowest

1:40,000

0 ⊢⊣⊢⊣⊢ 1 Km

N

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

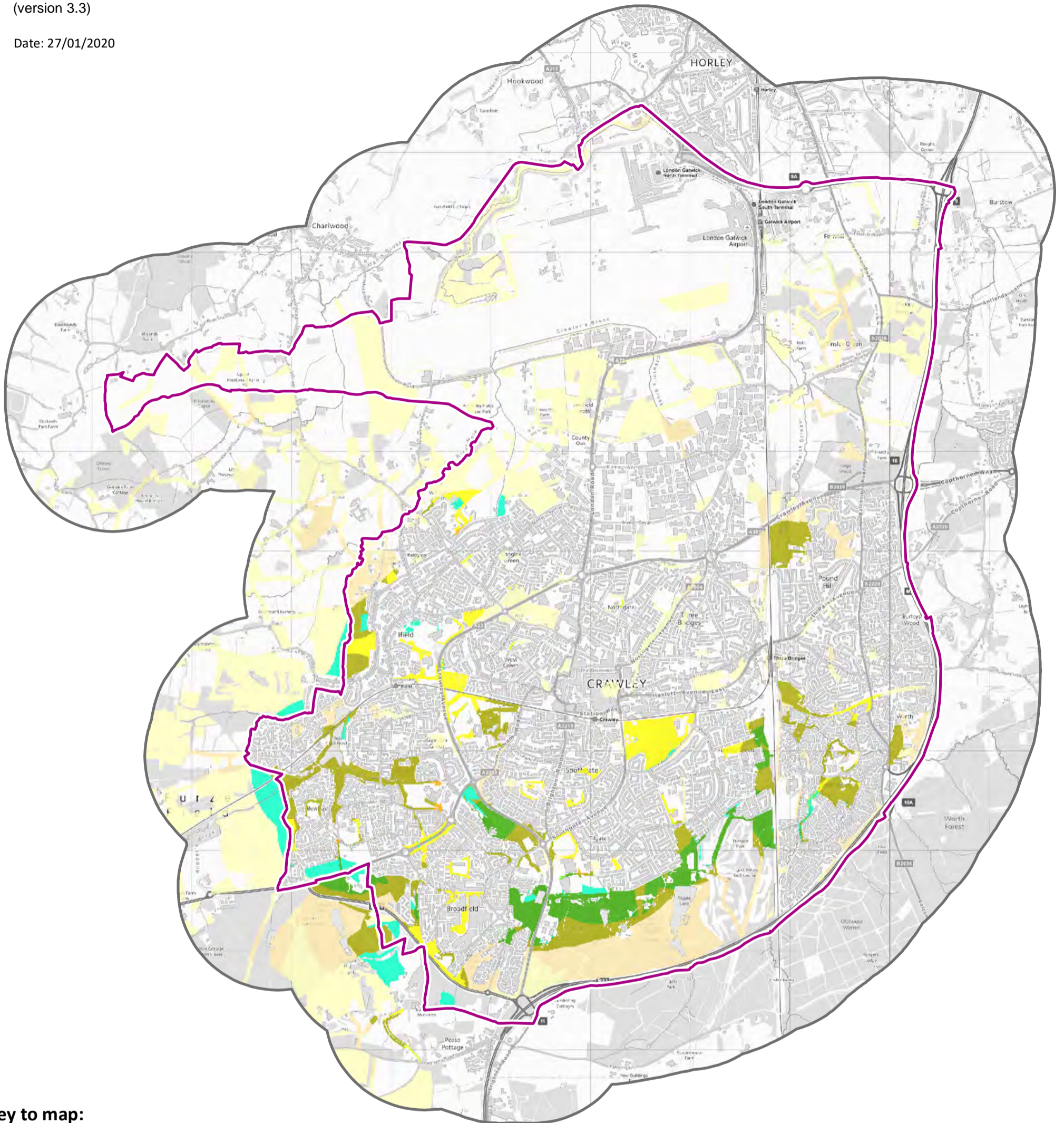|	Demand				
	Highest 5	**4**	**3**	**2**	**Lowest 1**
Highest: 5	Highest benefits				
4		High benefits			
3			Intermediate benefits		
2				Low benefits	
Lowest: 1					Lowest benefits

Capacity ↓

Areas where young people can benefit from the education and knowledge opportunities of diverse semi-natural habitats.

METHODS: Capacity and Demand quintiles are overlaid to estimate the levels of benefits that may be delivered to people by the habitats currently present (see above graphic). Not all categories are always present. White space indicates no data or no service benefits.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Education and Knowledge - Management Zones

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

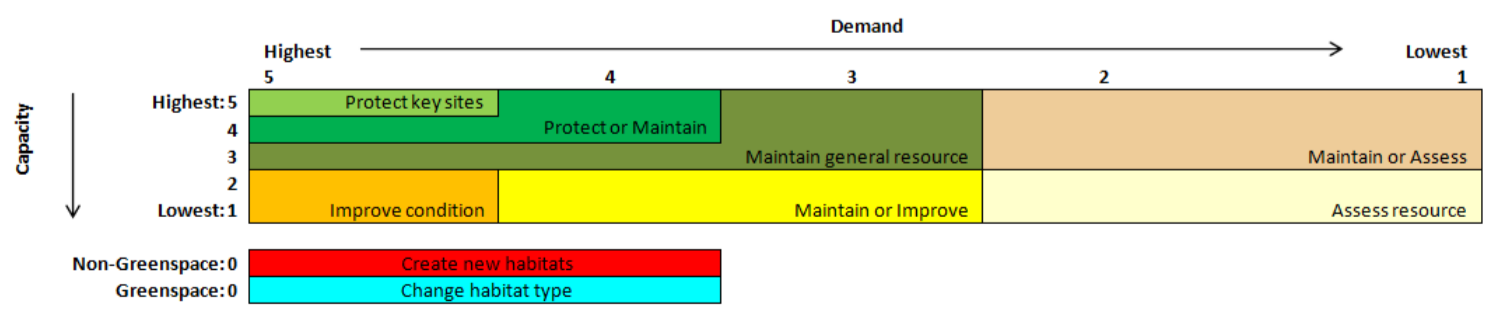▭ Study Area

▭ Study Area + buffer

Management Zones

- ▮ A1. Protect
- ▮ A2. Protect / Maintain
- ▮ A3. Maintain
- ▮ A4. Improve
- ▮ A5. Maintain / Improve
- ▮ A6. Maintain / Assess
- ▮ A7. Assess
- ▮ A8. Change habitat type: Highest Demand
- ▮ A9. Change habitat type: High Demand
- ▮ B1. Create: Highest Demand
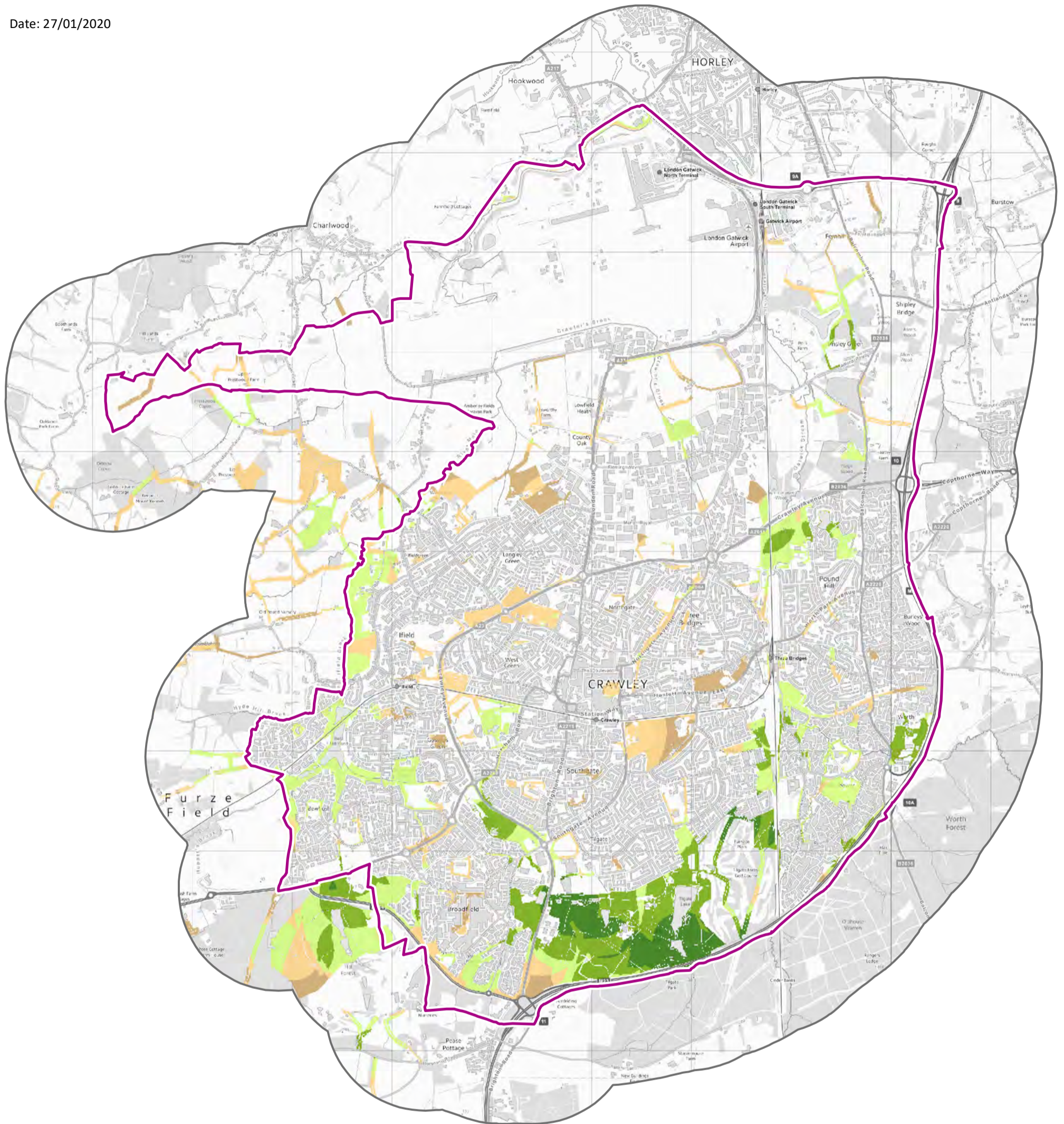- ▮ B2. Create: High Demand

1:40,000

N

0

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	Demand				
Capacity	Highest 5	4	3	2	Lowest 1
Highest: 5	Protect key sites				
4		Protect or Maintain			
3			Maintain general resource		Maintain or Assess
2					
Lowest: 1	Improve condition	Maintain or Improve			Assess resource
Non-Greenspace: 0	Create new habitats				
Greenspace: 0	Change habitat type				

Areas where young people can benefit from the education and knowledge opportunities of diverse semi-natural habitats.

METHODS: Capacity and Demand quintiles are overlaid to estimate the management interventions that could maintain or increase the benefits delivered to people (see above graphic). Not all categories are always present.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
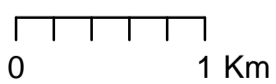
EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Education and Knowledge - GI Assets

Key to map:

☐ Study Area

☐ Study Area + buffer

GI Assets
- ☐ 80 - 100
- ☐ 60 - 80
- ☐ 40 - 60
- ☐ 20 - 40
- ☐ 1 - 20

1:40,000

N

0   1 Km

Areas where young people can benefit from the education and knowledge opportunities of diverse semi-natural habitats.

METHODS: This maps highlights those areas of existing natural, semi-natural, greenspace or green infrastructure (GI) sites where there is predicted demand for a service as well as a level of capacity to deliver the service, The "unrestricted" capacity is shown, for areas which are likely to be accessed by the public.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Green Travel - Capacity

Key to map:

Study Area

Study Area + buffer

Capacity Scores

- 80 - 100
- 60 - 80
- 40 - 60
- 20 - 40
- 1 - 20

1:40,000

N

0   1 Km

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717
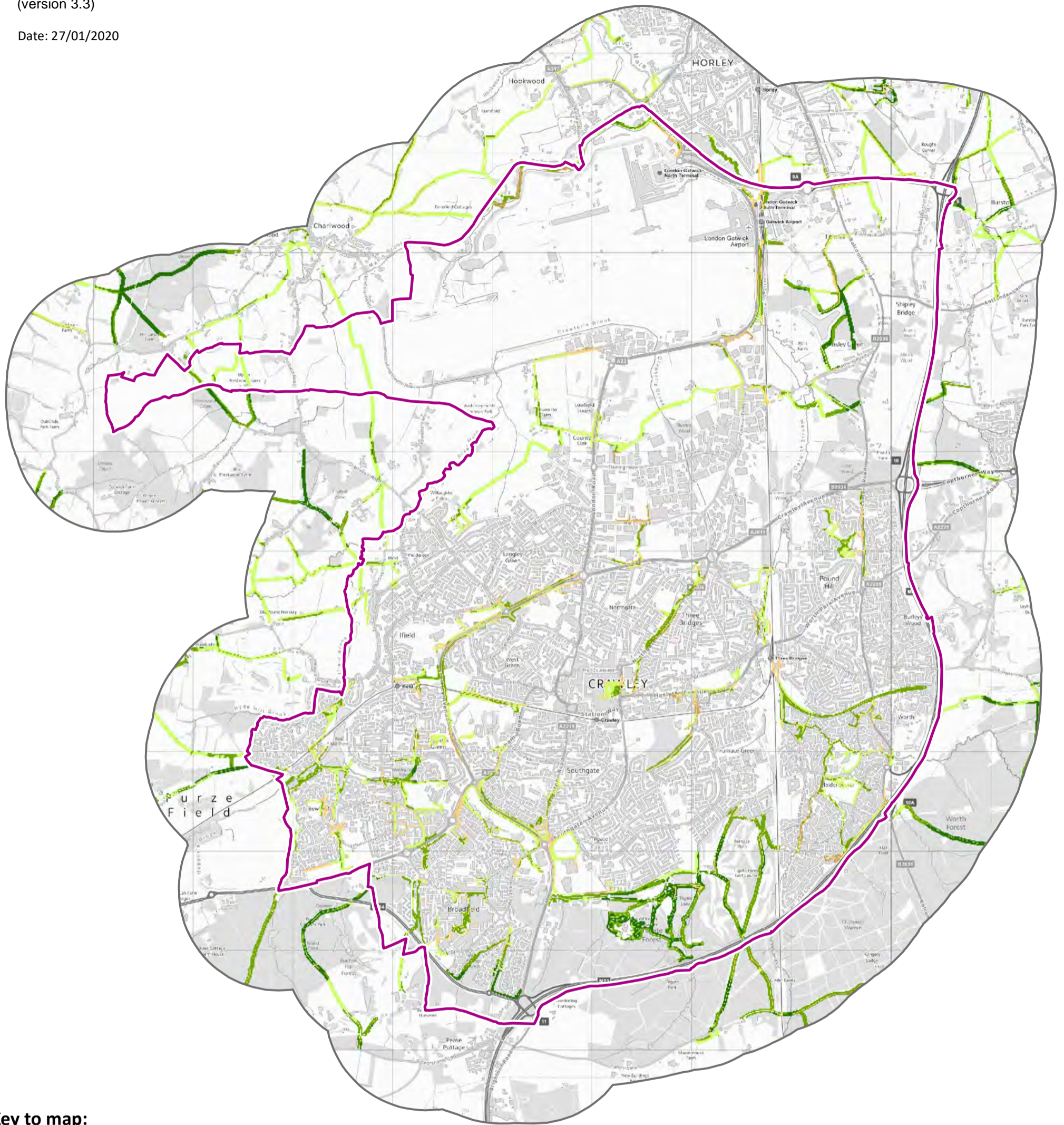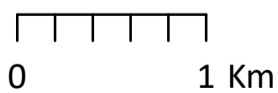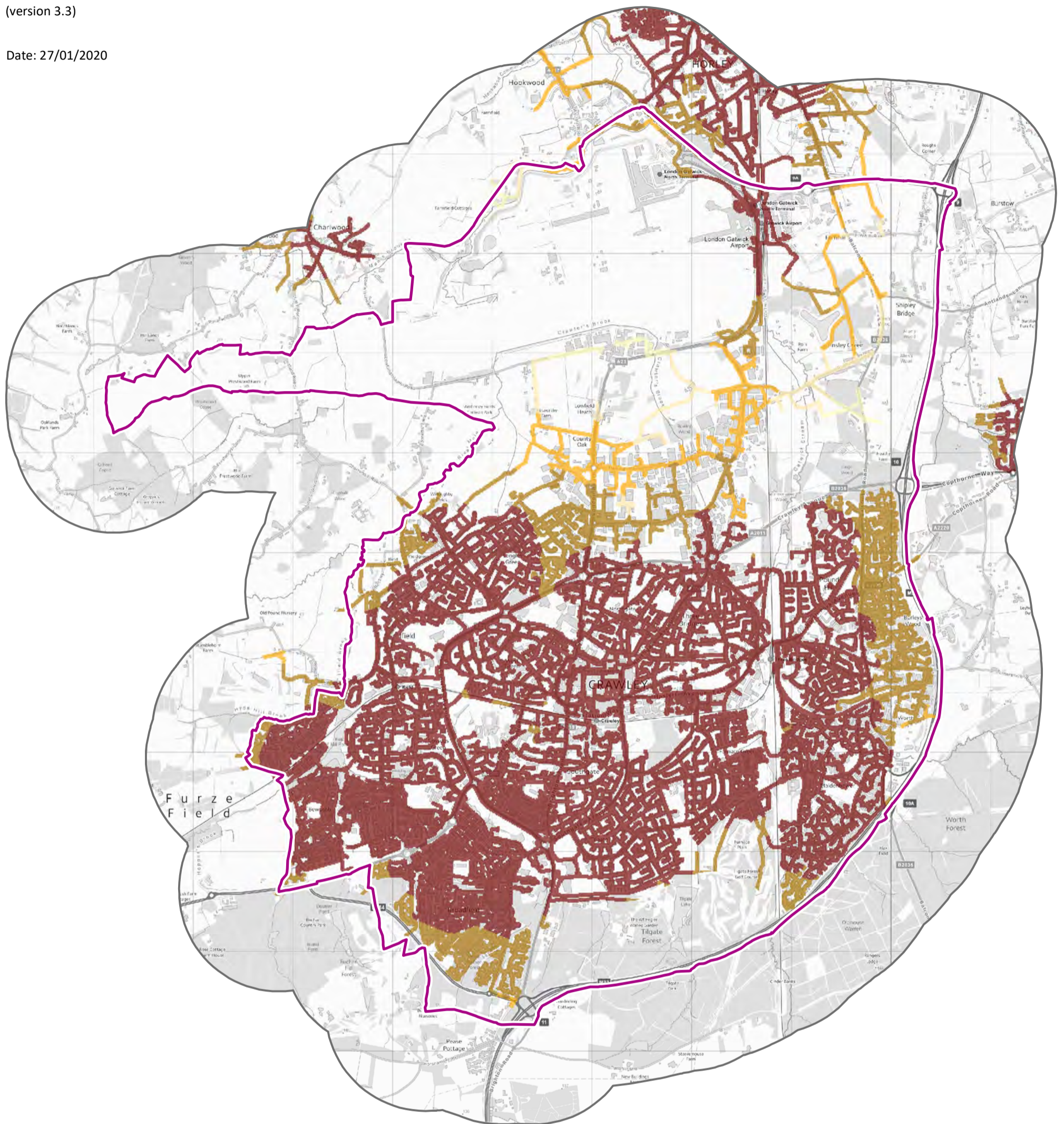
Green Travel routes are linear travel networks with a high cover of green infrastructure where people may benefit from a safer, calmer or more aesthetically pleasing travel route.

METHODS: This map reflects how "natural" habitat types are along linear travel networks. The model uses perceived naturalness scores.Routes are identified from Sustrans cycle routes, Public footpaths /Core paths and all pavements and paths mapped by OS MasterMap data. Informal footpaths and any paths not digitised within these data will not be idenified on the map. In rare cases paths and pavements will be mapped within private estates or industrial areas where no public access is permitted.Thresholds are applied to limit the area of mapped capacity.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Green Travel - Demand

Key to map:

☐ (magenta outline) Study Area

☐ Study Area + buffer

Demand scores
- ■ 80 - 100
- ■ 60 - 80
- ■ 40 - 60
- ☐ 20 - 40
- ☐ 1 - 20

1:40,000

N

0 — 1 Km

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

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Green Travel routes are linear travel networks with a high cover of green infrastructure where people may benefit from a safer, calmer or more aesthetically pleasing travel route.

Demand for Green Travel routes is mapped using a least-cost analysis, along the linear travel network. Travel destinations used are rail stations, town centre locations and schools. The maximum travel distance used can be altered by users. The default maximum travel distance is 4,500 m.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Green Travel - Service Benefitting Areas

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

⬭ Study Area

☐ Study Area + buffer

1:40,000

0 ——————— 1 Km

N ▲

Benefits to people

🟩	A1. Highest
🟩	A2. High
🟩	A3. Intermediate
🟧	A4. Low
⬜	A5. Lowest

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Sussex Wildlife Trust

Sussex Biodiversity Record Centre

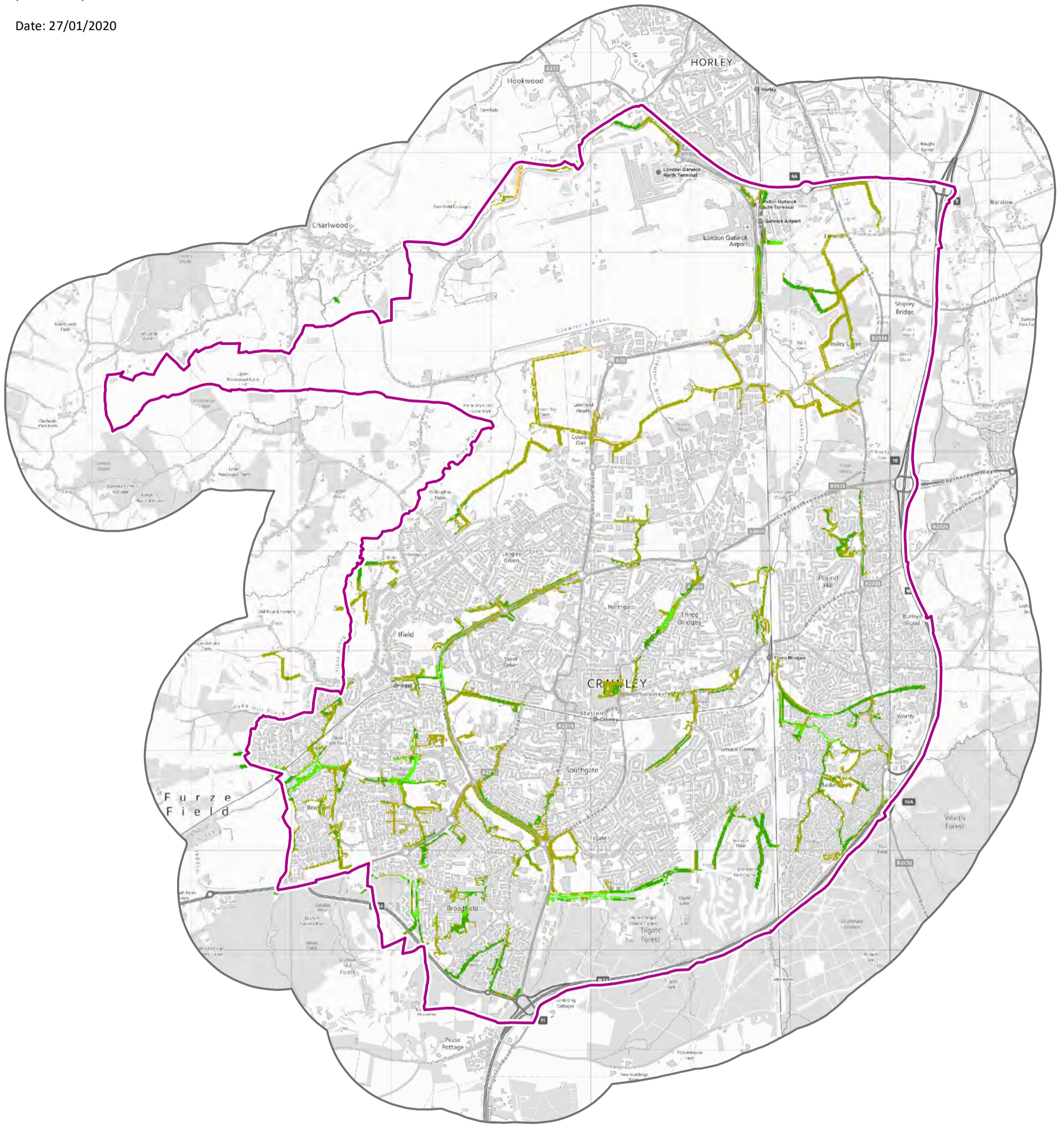|		**Demand**			
	Highest				**Lowest**
	5	**4**	**3**	**2**	**1**
Highest: 5	Highest benefits				
4		High benefits			
3			Intermediate benefits		
2				Low benefits	
Lowest: 1					Lowest benefits

Capacity ↓

Green Travel routes are linear travel networks with a high cover of green infrastructure where people may benefit from a safer, calmer or more aesthetically pleasing travel route.

METHODS: Capacity and Demand quintiles are overlaid to estimate the levels of benefits that may be delivered to people by the habitats currently present (see above graphic). Not all categories are always present. White space indicates no data or no service benefits.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
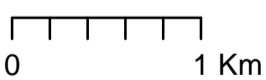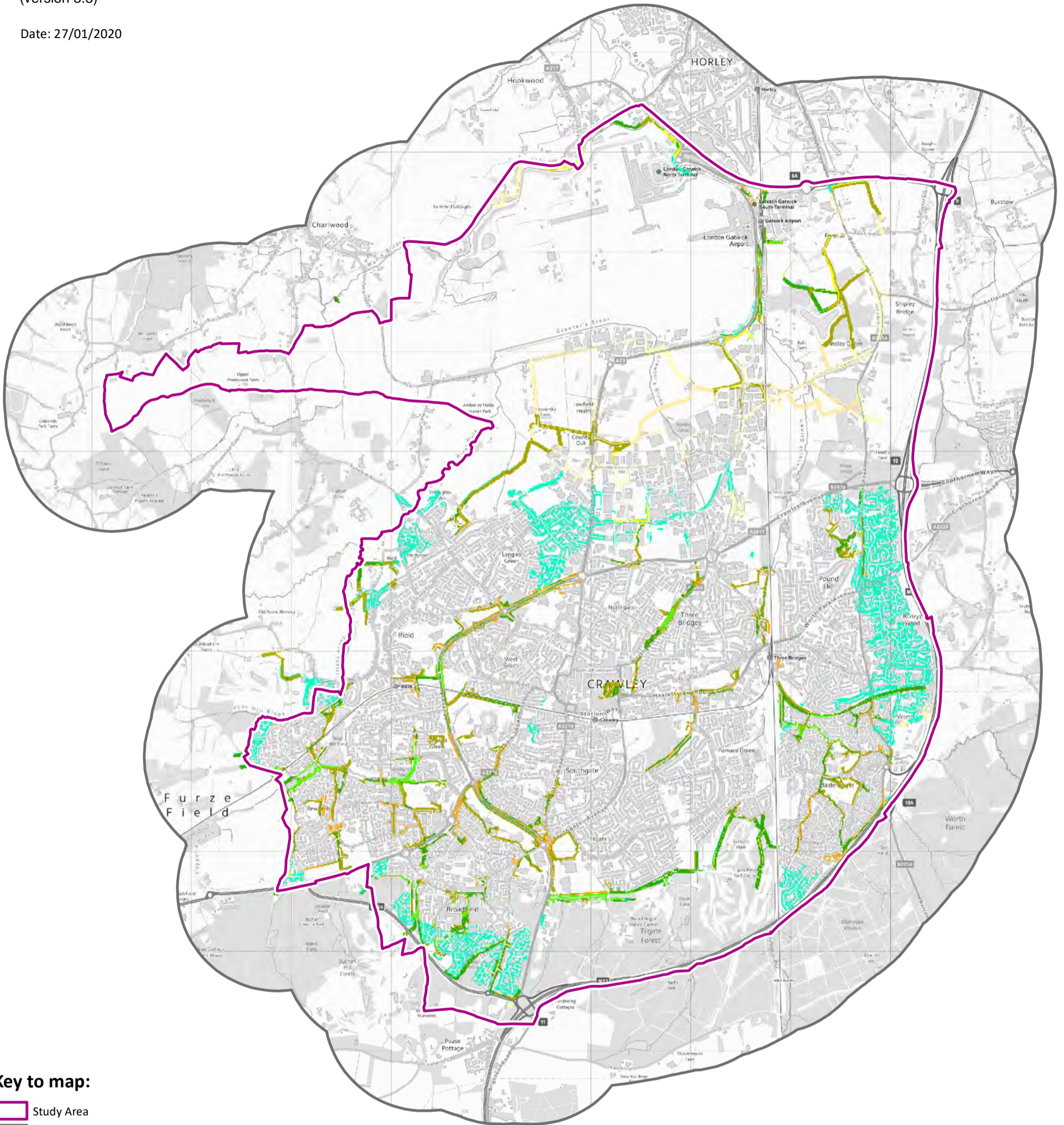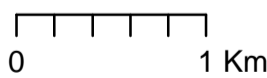
Green Travel - Management Zones

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

- ▭ Study Area
- ▭ Study Area + buffer

Management Zones

- A1. Protect
- A2. Protect / Maintain
- A3. Maintain
- A4. Improve
- A5. Maintain / Improve
- A6. Maintain / Assess
- A7. Assess
- A8. Change habitat type: Highest Demand
- A9. Change habitat type: High Demand
- B1. Create: Highest Demand
- B2. Create: High Demand

1:40,000

0   1 Km

N

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

	Demand				
Highest	5	4	3	2	Lowest 1
Capacity — Highest: 5	Protect key sites				
4		Protect or Maintain			
3			Maintain general resource		Maintain or Assess
2	Improve condition				
Lowest: 1		Maintain or Improve			Assess resource
Non-Greenspace: 0	Create new habitats				
Greenspace: 0	Change habitat type				

Green Travel routes are linear travel networks with a high cover of green infrastructure where people may benefit from a safer, calmer or more aesthetically pleasing travel route.

METHODS: Capacity and Demand quintiles are overlaid to estimate the management interventions that could maintain or increase the benefits delivered to people (see above graphic). Not all categories are always present.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Green Travel - GI Assets

EcoServ-GIS
(version 3.3)

Date: 27/01/2020

Key to map:

▭ Study Area
▭ Study Area + buffer

GI Assets

◼ 80 - 100
◼ 60 - 80
◼ 40 - 60
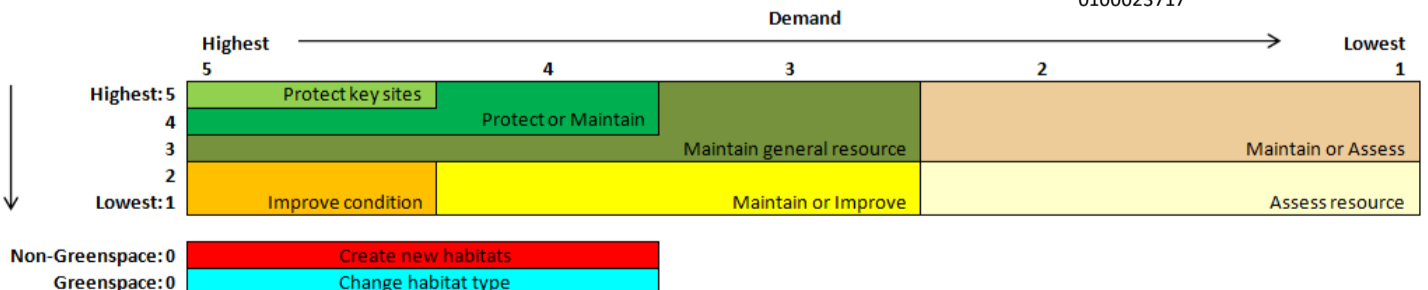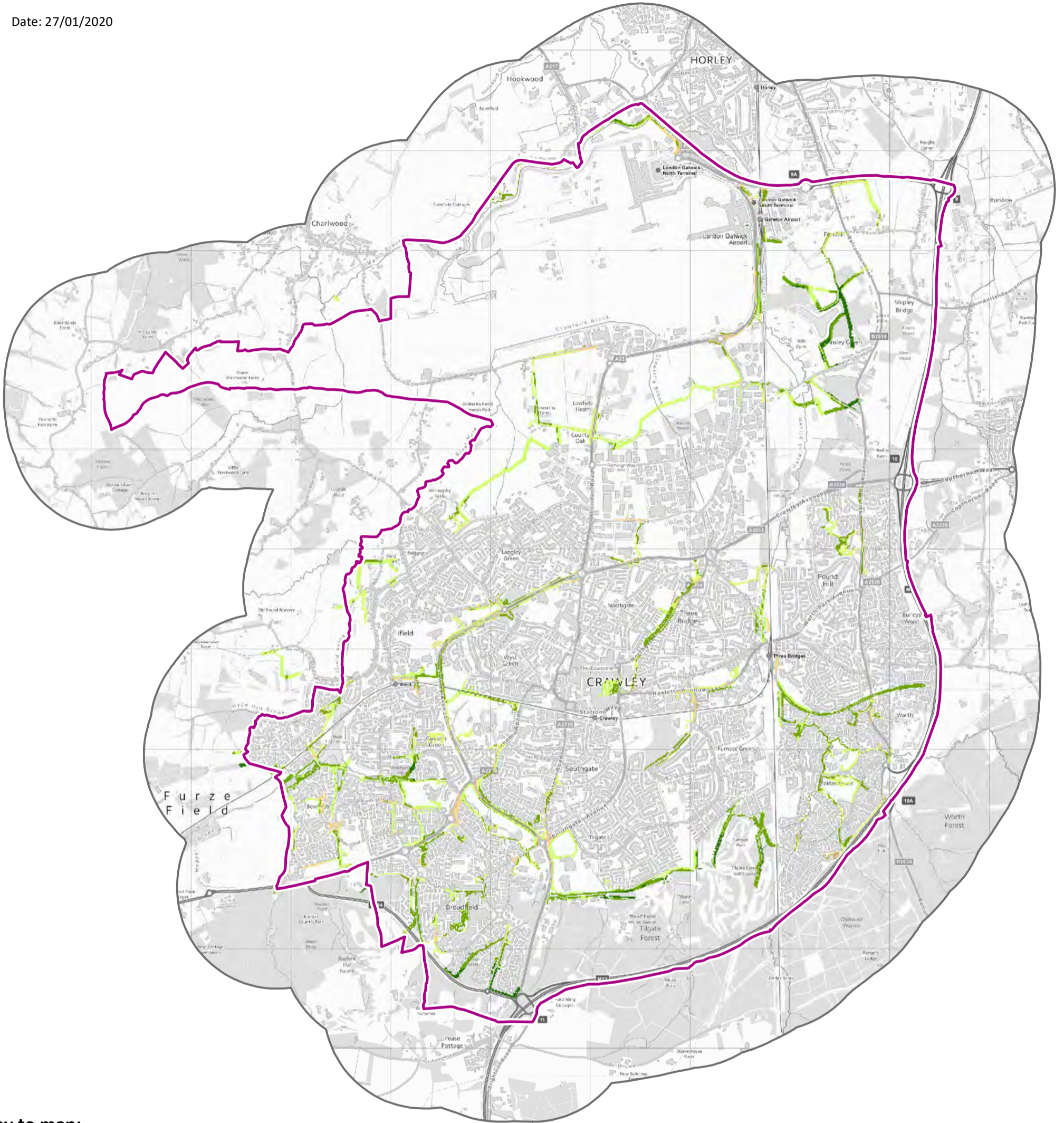◼ 20 - 40
◼ 1 - 20

1:40,000

N

0   1 Km

Sussex Wildlife Trust

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Green Travel routes are linear travel networks with a high cover of green infrastructure where people may benefit from a safer, calmer or more aesthetically pleasing travel route.

METHODS: This map highlights those areas of existing natural, semi-natural, Greenspace or Green Infrastructure (GI) sites where there is predicted demand for a service as well as a level of capacity to deliver the service, Those areas with capacity, but with no demand, are ommitted from this map.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Local Climate Regulation - Capacity

Key to map:

Study Area

Study Area + buffer

Capacity Scores

- 80 - 100
- 60 - 80
- 40 - 60
- 20 - 40
- 1 - 20

1:40,000

N

0   1 Km

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

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Local climate regulation reflects the ability of different ecosystems and habitats to absorb or intercept sunlight and reflected heat, controlling local temperatures & reducing the urban heat island effect

METHODS: Local climate regulation values per ecosystem / habitat are inferred from available literature. These are based on the area coverage of woodland habitats. Habitat age and management is not considered. Thresholds are applied to limit the area of mapped capacity. Defaults are applied, but can be varied with custom settings. Defaults: Local search distance = 200m

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
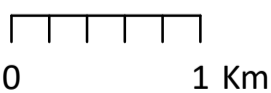
Local Climate Regulation - Demand

EcoServ-GIS
(version 3.3)

Date: 24/01/2020

Key to map:

— Study Area

— Study Area + buffer

Demand scores
- ■ 80 - 100
- ■ 60 - 80
- ■ 40 - 60
- ■ 20 - 40
- ■ 1 - 20

1:40,000

0   1 Km

N

Sussex Wildlife Trust
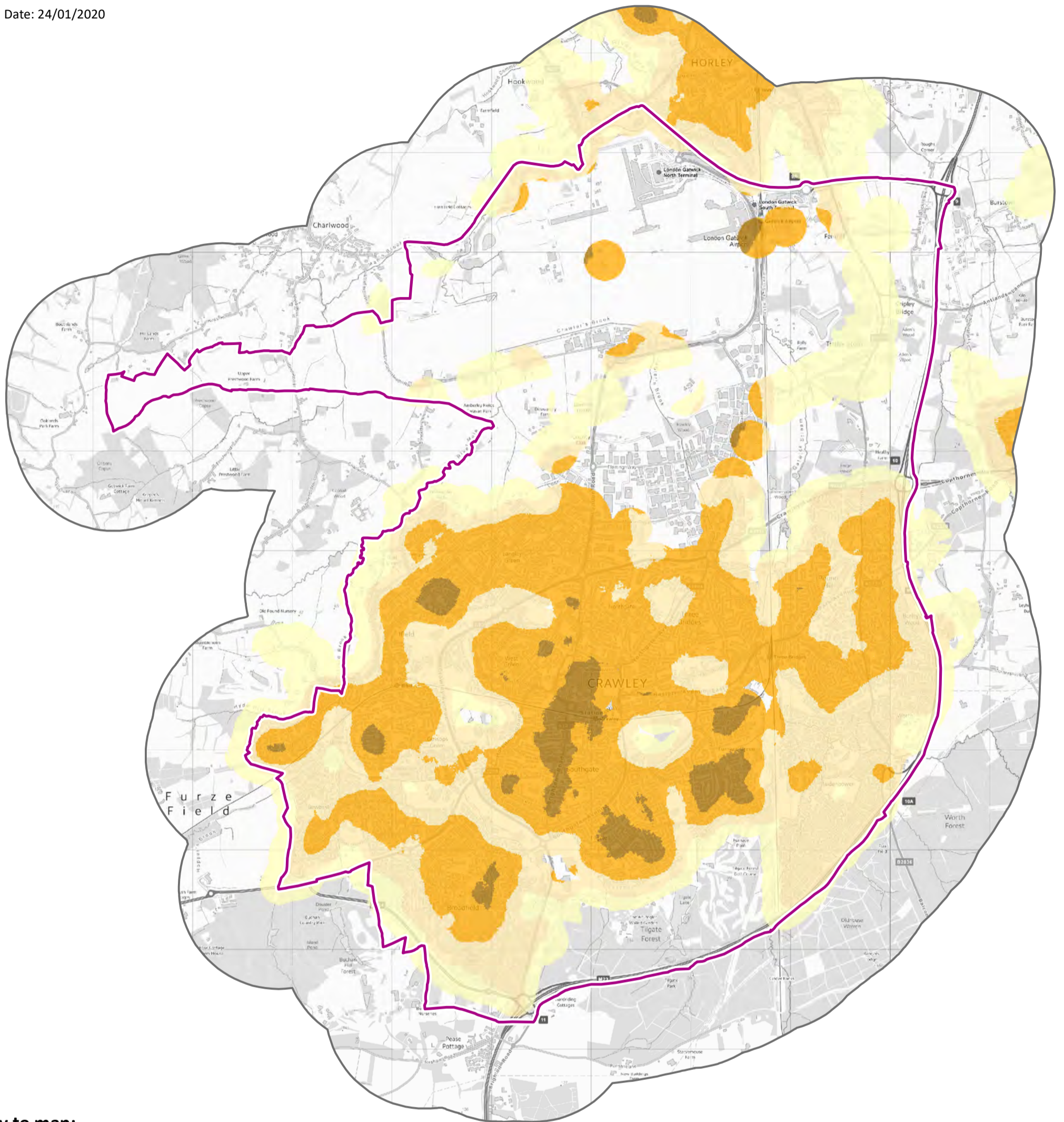
Sussex Biodiversity Record Centre

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnance Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717

Local climate regulation reflects the ability of different ecosystems and habitats to absorb or intercept sunlight and reflected heat, controlling local temperatures & reducing the urban heat island effect

METHODS: Larger urban areas are assumed to have demand for Local Climate Regulation. Demand is mapped based on cover of man made surfaces, population density and the proportion of the local population potentially susceptible to heat waves (based on age). There is assumed to be no demand in non-urban areas or areas below the mapped population density thresholds. Thresholds are applied to limit the area of mapped Demand. Defaults are applied, but can be varied with custom settings. Local search distance (population size) = 200 m Local search distance (age risk score) = 200 m. Minimum population size (local scale) > 50 people. Urban areas with heat islands (> 1,000 ha). Local cover of man made surfaces = 200 m

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
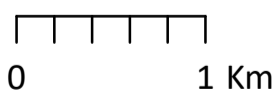
Local Climate Regulation - Service Benefitting Areas

EcoServ-GIS
(version 3.3)

Date: 24/01/2020

Key to map:

▭ (magenta outline)	Study Area
▭ (grey outline)	Study Area + buffer

1:40,000

Benefits to people

- 🟩 A1. Highest
- 🟩 A2. High
- 🟩 A3. Intermediate
- 🟧 A4. Low
- 🟨 A5. Lowest

N

0   1 Km

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

	Demand				
	Highest 5	4	3	2	Lowest 1
Capacity Highest: 5	Highest benefits				
4		High benefits			
3			Intermediate benefits		
2				Low benefits	
Lowest: 1					Lowest benefits

Local climate regulation reflects the ability of different ecosystems and habitats to absorb or intercept sunlight and reflected heat, controlling local temperatures & reducing the urban heat island effect.

METHODS: Capacity and Demand quintiles are overlaid to estimate the levels of benefits that may be delivered to people by the habitats currently present (see above graphic). Not all categories are always present. White space indicates no data or no service benefits.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Local Climate Regulation - Management Zones

EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Key to map:

Study Area	
Study Area + buffer	

Management Zones

- A1. Protect
- A2. Protect / Maintain
- A3. Maintain
- A4. Improve
- A5. Maintain / Improve
- A6. Maintain / Assess
- A7. Assess
- A8. Change habitat type: Highest Demand
- A9. Change habitat type: High Demand
- B1. Create: Highest Demand
- B2. Create: High Demand

1:40,000

0   1 Km

N

		Demand				
		Highest 5	4	3	2	Lowest 1
Capacity	Highest: 5	Protect key sites				
	4		Protect or Maintain			
	3			Maintain general resource		Maintain or Assess
	2					
	Lowest: 1	Improve condition		Maintain or Improve		Assess resource
Non-Greenspace: 0		Create new habitats				
Greenspace: 0		Change habitat type				

Local climate regulation reflects the ability of different ecosystems and habitats to absorb or intercept sunlight and reflected heat, controlling local temperatures & reducing the urban heat island effect.

METHODS: Capacity and Demand quintiles are overlaid to estimate the management interventions that could maintain or increase the benefits delivered to people (see above graphic). Not all categories are always present.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Local Climate Regulation - GI Assets

EcoServ-GIS

(version 3.3)

Date: 24/01/2020

Key to map:

Study Area

Study Area + buffer

GI Assets

80 - 100

60 - 80

40 - 60

20 - 40

1 - 20

1:40,000

N

0   1 Km
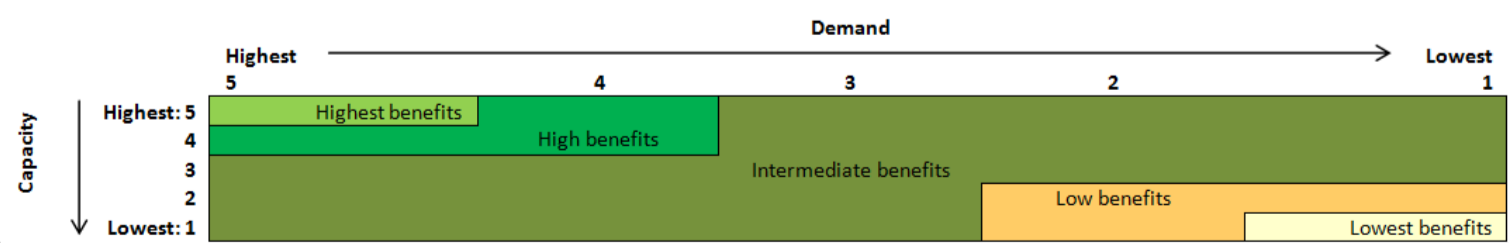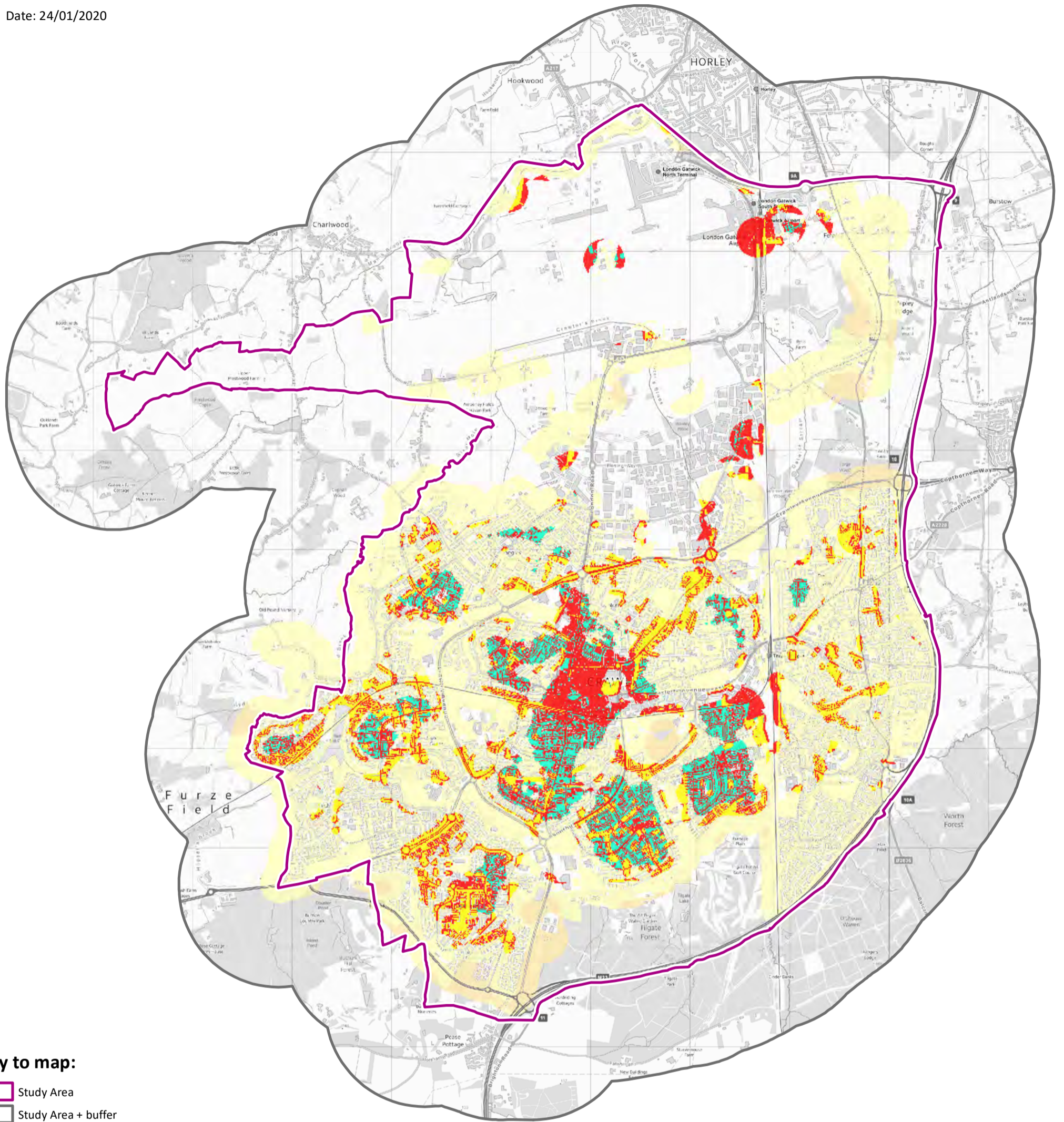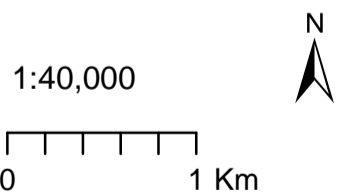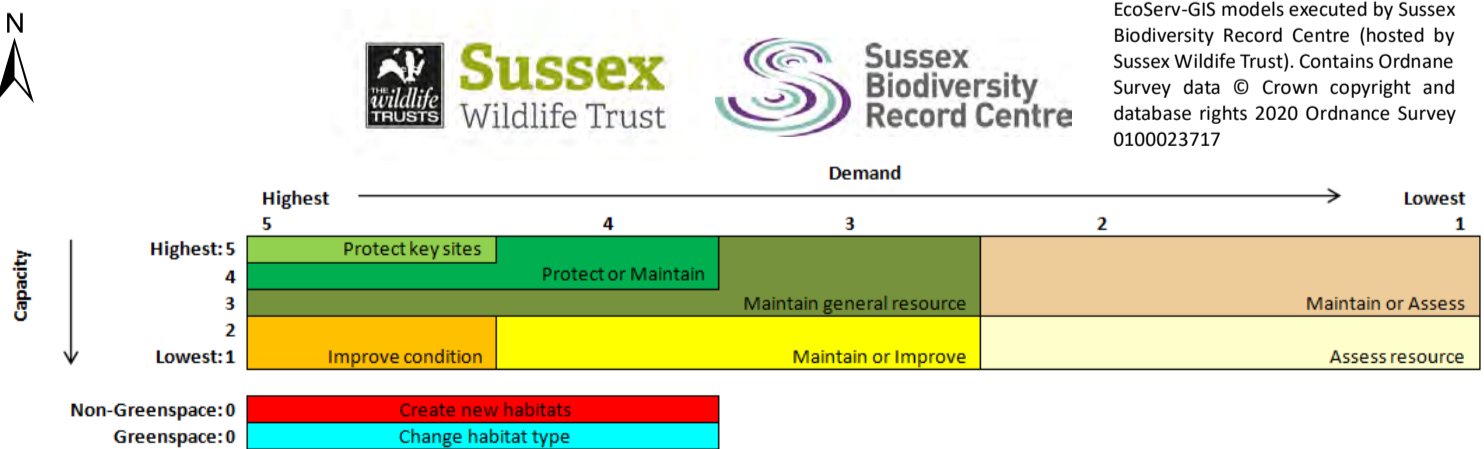
Sussex Wildlife Trust

Sussex Biodiversity Record Centre

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnance Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717
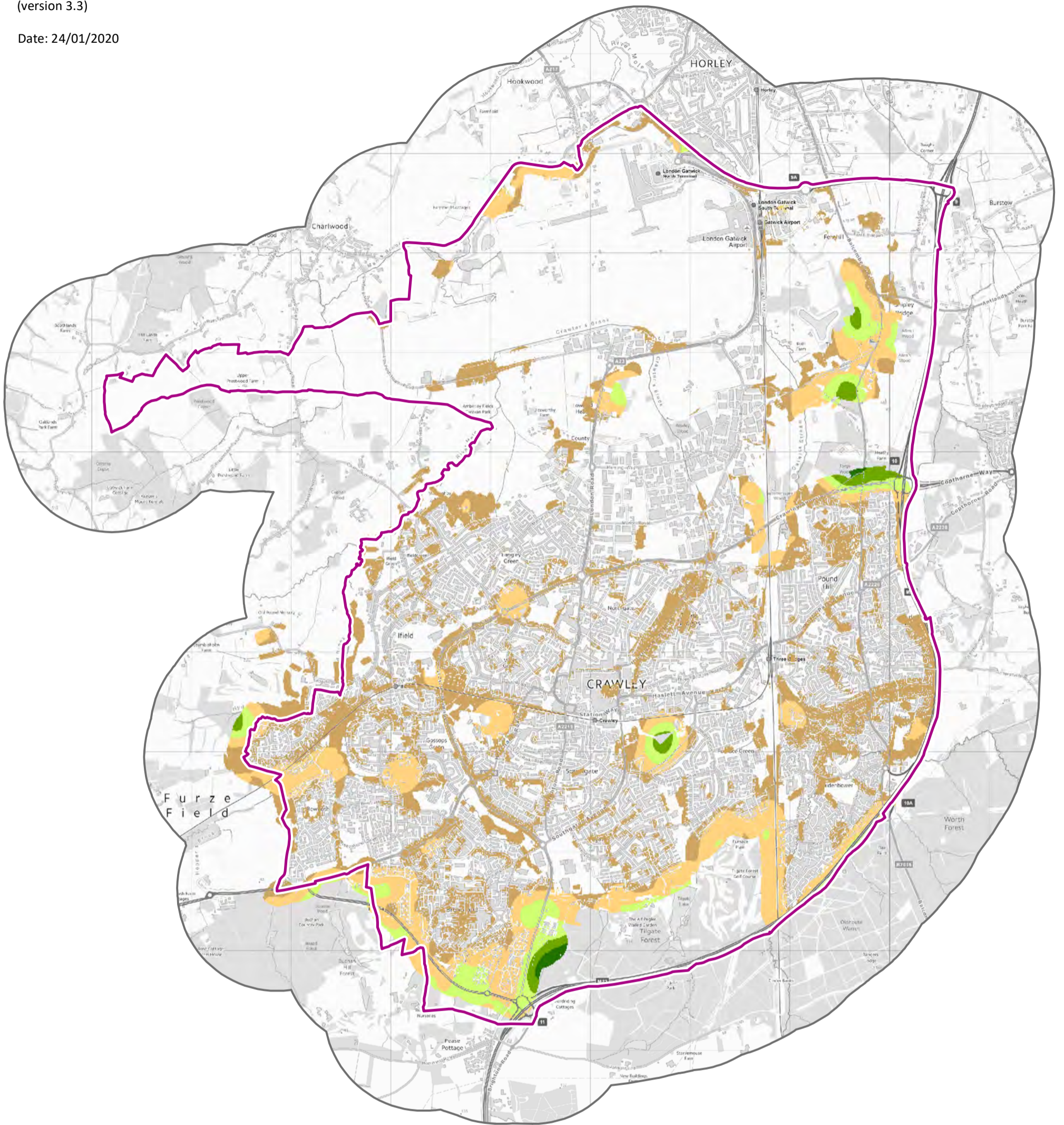
Local climate regulation reflects the ability of different ecosystems and habitats to absorb or intercept sunlight and reflected heat,

METHODS: This map highlights those areas of existing natural, semi-natural, Greenspace or Green Infrastructure (GI) sites where there is predicted demand for a service as well as a level of capacity to deliver the service, Those areas with capacity, but with no demand, are ommitted from this map.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

# Noise Regulation - Capacity

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

Study Area

Study Area + buffer

Capacity Scores

- 80 - 100
- 60 - 80
- 40 - 60
- 20 - 40
- 1 - 20

1:40,000

N

0   1 Km

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717
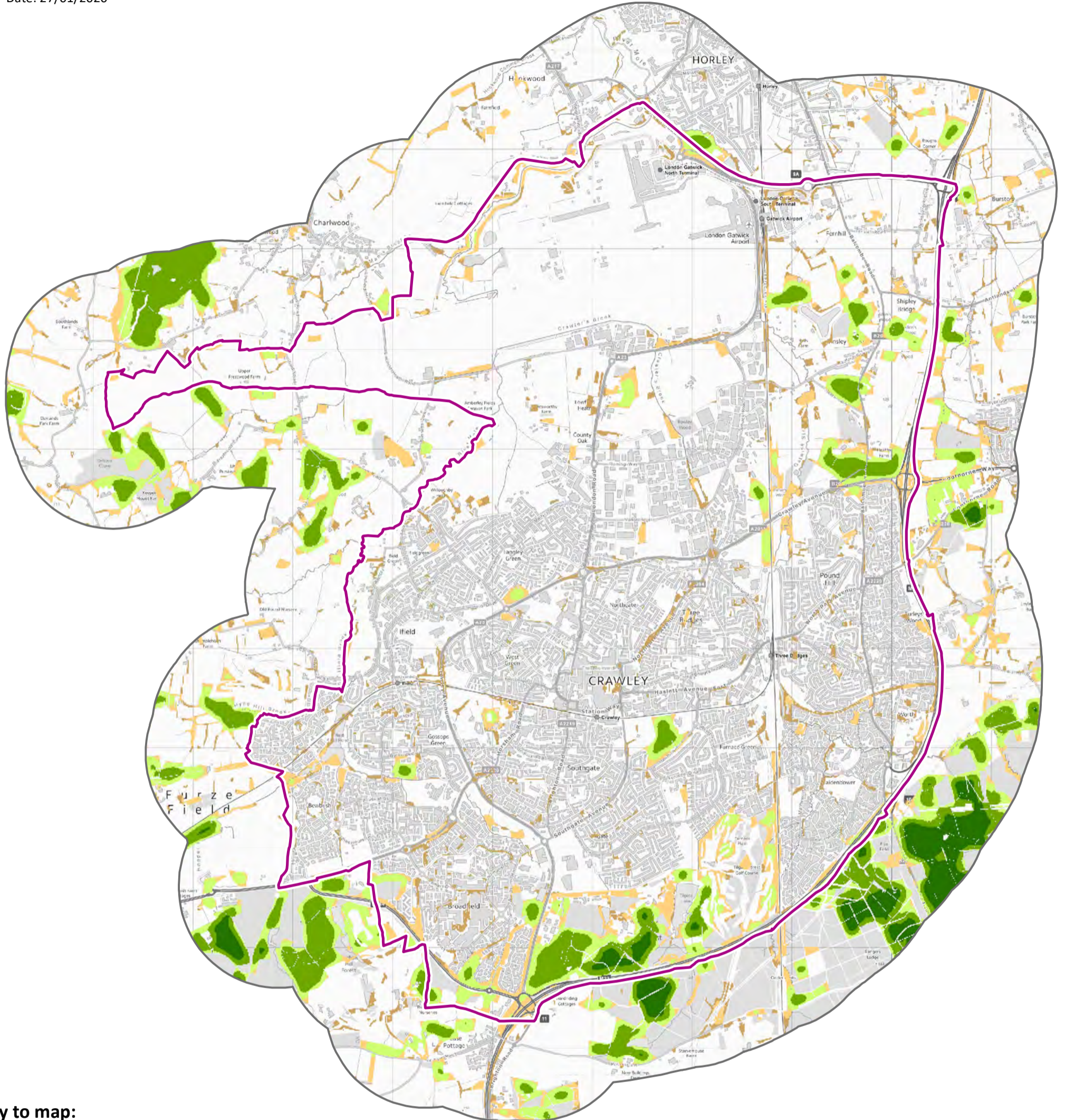
Noise regulation capacity reflects the ability of different ecosystems and habitats to absorb noise pollution.

METHODS: Noise regulation values per ecosystem / habitat are inferred from available literature. These are estimated typical values. Habitat age and management is not considered. Analysis is conducted at short and local scales to give capacity scores based on habitat type and patch size. Default short scale distance = 30 m. Default local scale distance = 100 m

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Noise Regulation - Demand

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

— Study Area

— Study Area + buffer

Demand scores
- ■ 80 - 100
- ■ 60 - 80
- ■ 40 - 60
- ☐ 20 - 40
- ☐ 1 - 20

1:40,000

0   1 Km

N
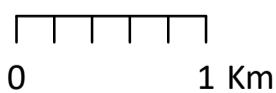
Sussex Wildlife Trust

Sussex Biodiversity Record Centre

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Noise regulation demand reflects the predicted need for noise regulation. This is based on modelled noise levels, population density and health data.

METHODS: Local search distance (population size) = 300 m, Minimum population size (local scale) = 50, Local search distance health scores = 300 m, Max noise distance from airports = 1500 m, Max noise distance from motorways = 800 m, Max noise distance from railways = 650 m, Max noise distance from A roads = 600 m, Max noise distance from B roads = 550 m. Thresholds are applied to limit the area of mapped Demand. Defaults are applied, but can be varied with custom settings.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
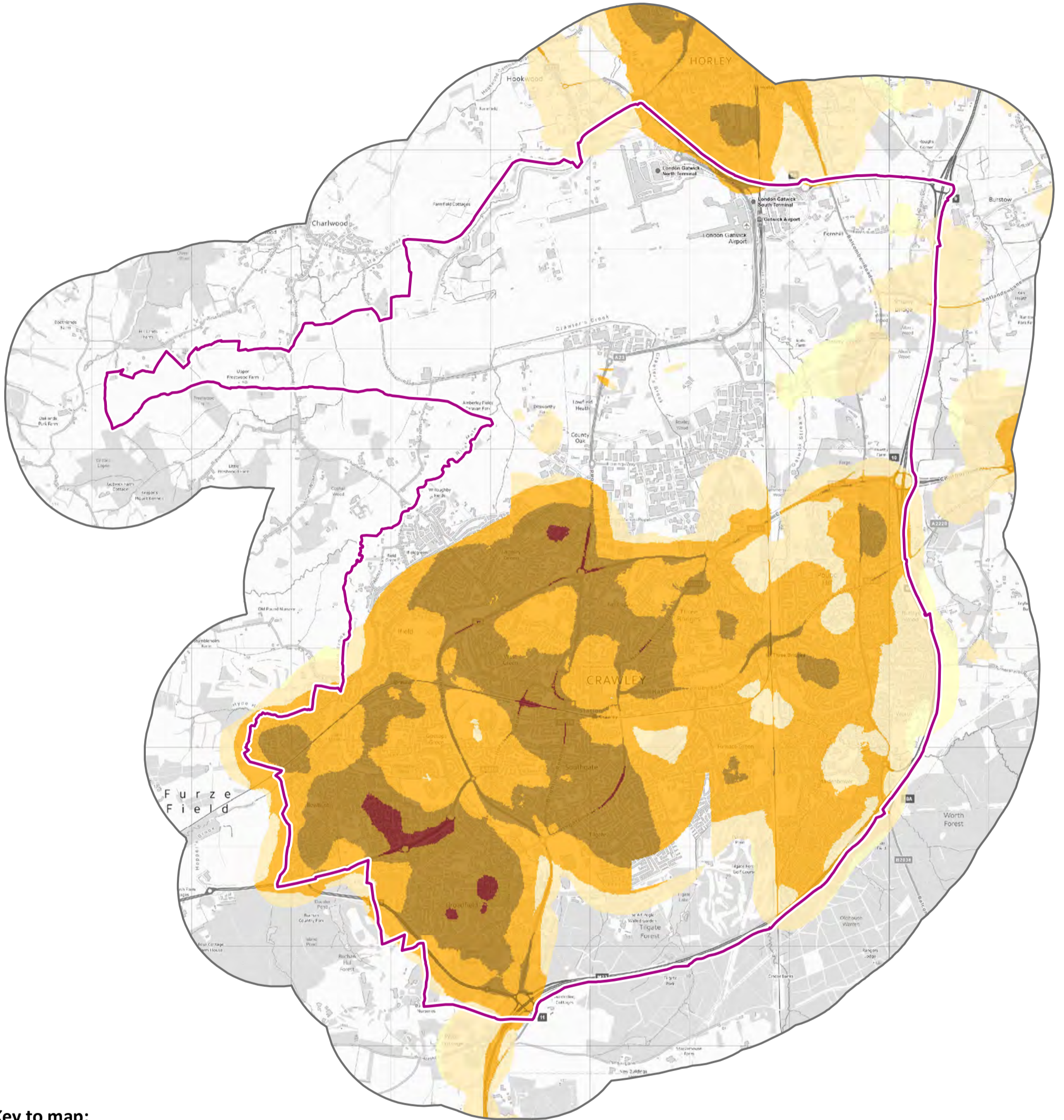
Noise Regulation - Service Benefitting Areas

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

Study Area

Study Area + buffer

1:40,000

N

0   1 Km

Benefits to people

- A1. Highest
- A2. High
- A3. Intermediate
- A4. Low
- A5. Lowest

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

	Demand				
	Highest 5	4	3	2	Lowest 1
Capacity Highest: 5	Highest benefits				
4		High benefits			
3			Intermediate benefits		
2				Low benefits	
Lowest: 1					Lowest benefits

Areas where people benefit from the noise reducing impact of semi-natural habitats and ecosystems

METHODS: Capacity and Demand quintiles are overlaid to estimate the levels of benefits that may be delivered to people by the habitats currently present (see above graphic). Not all categories are always present. White space indicates no data or no service benefits.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Noise Regulation - Management Zones

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

- ▢ Study Area
- ▢ Study Area + buffer

Management Zones

- A1. Protect
- A2. Protect / Maintain
- A3. Maintain
- A4. Improve
- A5. Maintain / Improve
- A6. Maintain / Assess
- A7. Assess
- A8. Change habitat type: Highest Demand
- A9. Change habitat type: High Demand
- B1. Create: Highest Demand
- B2. Create: High Demand

N

1:40,000

0   1 Km

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717
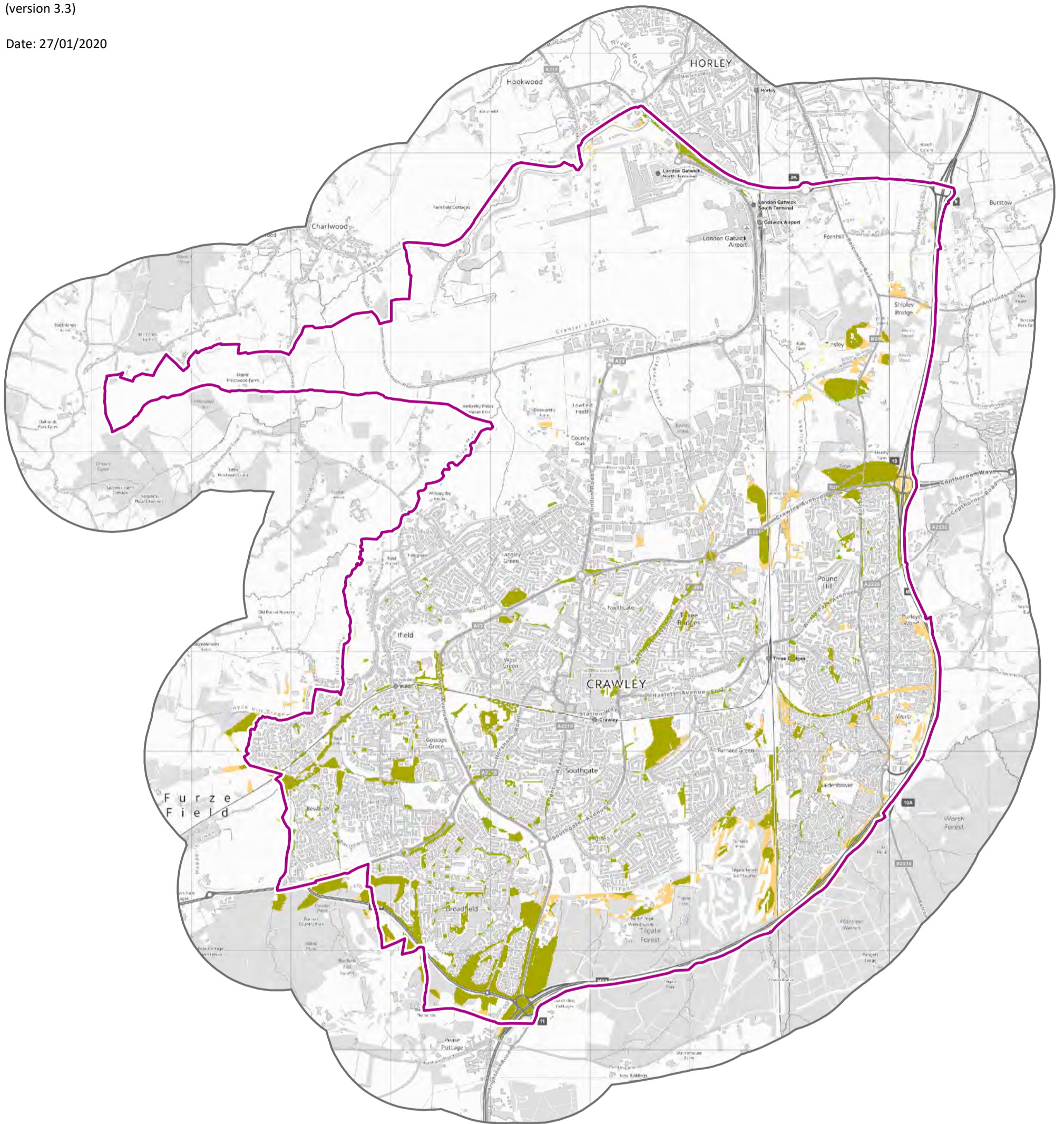
Capacity	Demand				
	Highest 5	4	3	2	Lowest 1
Highest: 5	Protect key sites				
4		Protect or Maintain			
3			Maintain general resource		Maintain or Assess
2					
Lowest: 1	Improve condition		Maintain or Improve		Assess resource
Non-Greenspace: 0	Create new habitats				
Greenspace: 0	Change habitat type				

Areas where people benefit from the noise reducing impact of semi-natural habitats and ecosystems.

METHODS: Capacity and Demand quintiles are overlaid to estimate the management interventions that could maintain or increase the benefits delivered to people (see above graphic). Not all categories are always present.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
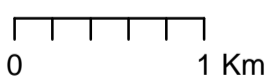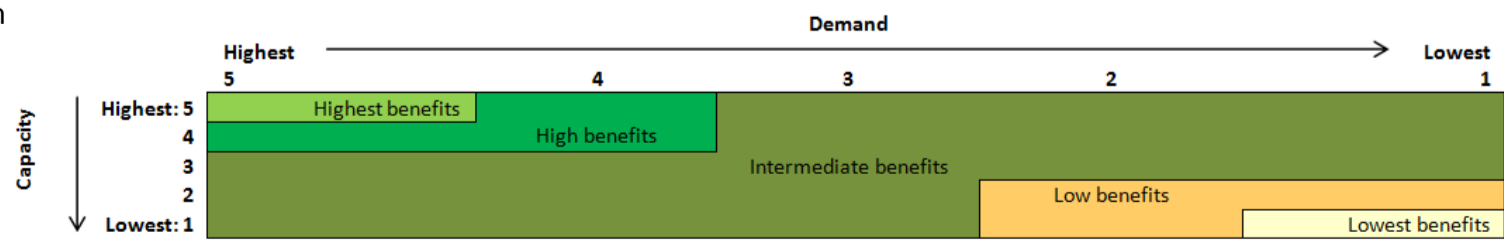
Noise Regulation - GI Assets

Key to map:

Study Area
Study Area + buffer

GI Assets

80 - 100
60 - 80
40 - 60
20 - 40
1 - 20

1:40,000

N

0   1 Km

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnance Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717
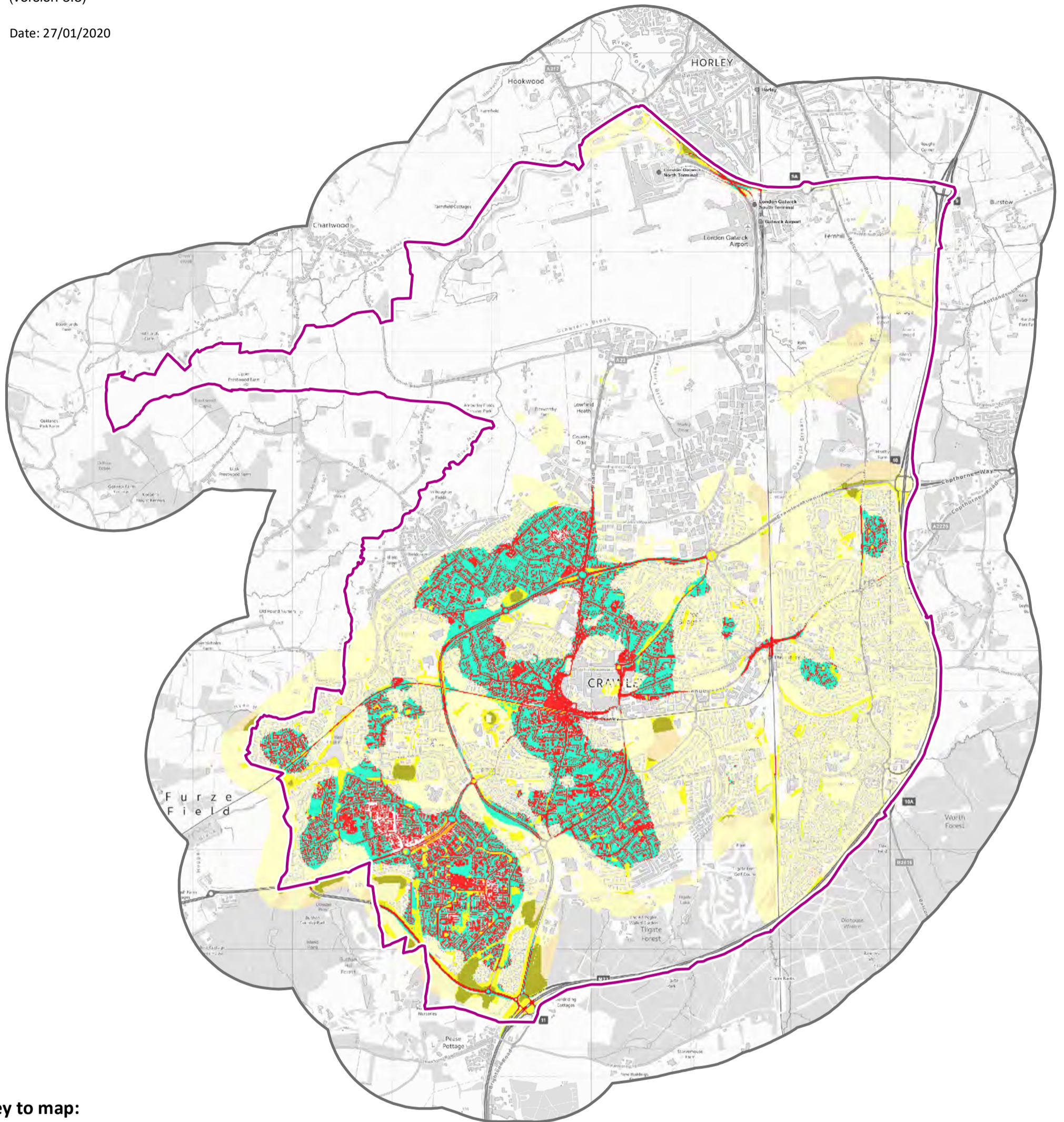
Noise regulation capacity reflects the ability of different ecosystems and habitats to absorb noise pollution.

METHODS: This map highlights those areas of existing natural, semi-natural, Greenspace or Green Infrastructure (GI) sites where there is predicted demand for a service as well as a level of capacity to deliver the service, Those areas with capacity, but with no demand, are ommitted from this map.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
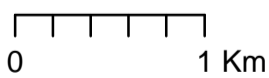
Pollination - Capacity

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

Study Area

Capacity Scores

- 80 - 100
- 60 - 80
- 40 - 60
- 20 - 40
- 1 - 20
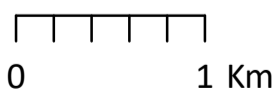
1:40,000

N

0   1 Km

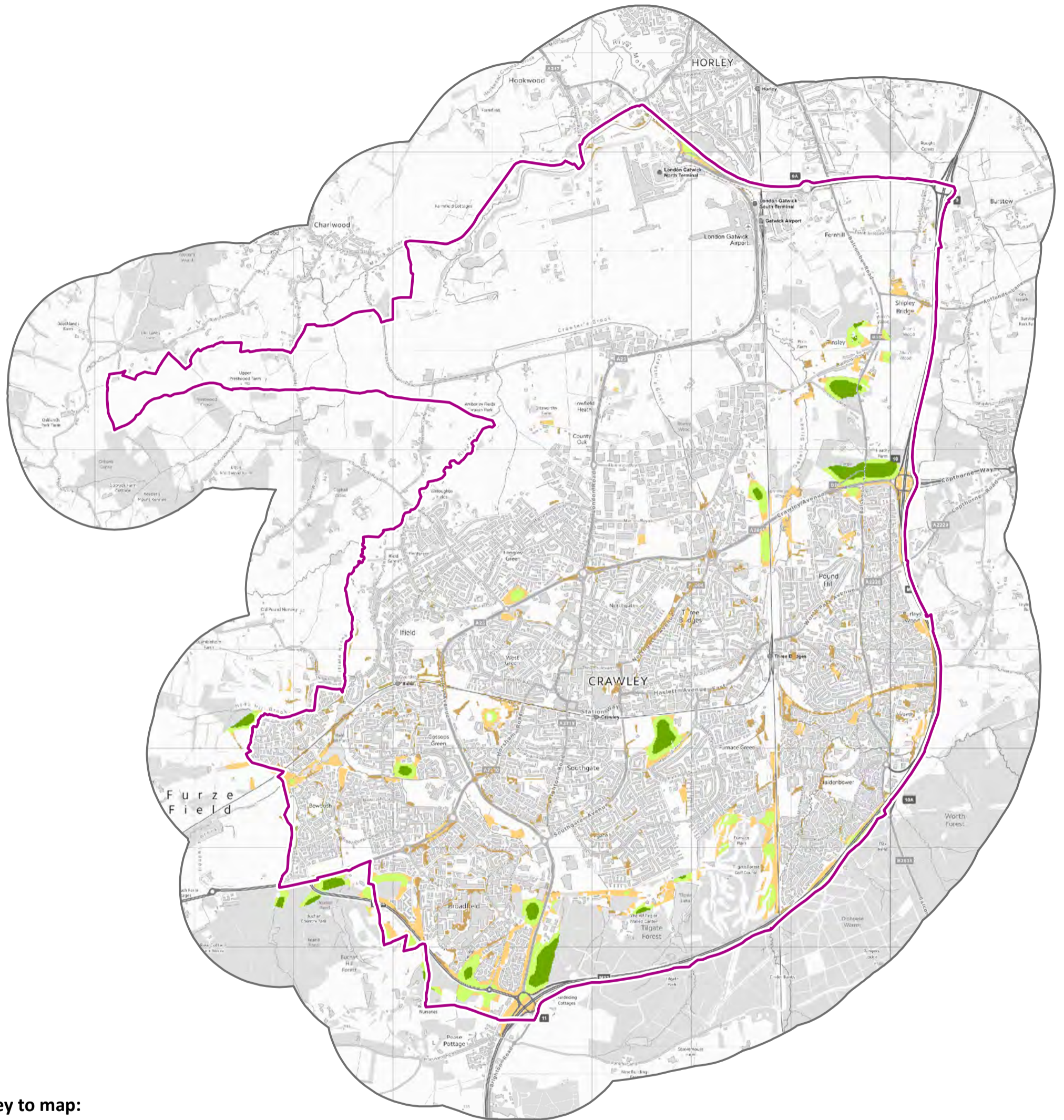**Sussex Wildlife Trust**

Sussex Biodiversity Record Centre

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717

Pollination capacity reflects the ability of different ecosystems to support wild pollinators, using an estimate of likely visitation by pollinators.

METHODS: Habitat types such as grassland and linear and edge habitats are identified that are likely to support wild pollinators. Distance from pollinator habitat is used to indicate the potential visitation likelihood by wild pollinators. A maximum travel distance of ~700 m is used within the mapping. Beyond this distance from a pollinator source habitat there is expected to be no capacity for pollination. Edge habitat is identified as 20 m into woodland habitats.

LIMITATIONS: The method used only considers habitat type and distance. No information on habitat area or habitat quality is included. The presence of any large areas of "unknown" or "unclassified" habitats in the BaseMap will have low capacity in this map. EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
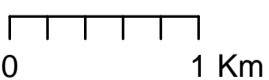
Pollination - Demand

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

Study Area

Study Area + buffer

Demand scores

- 80 - 100
- 60 - 80
- 40 - 60
- 20 - 40
- 1 - 20

1:40,000

N

0   1 Km

Sussex Wildlife Trust

Sussex Biodiversity Record Centre
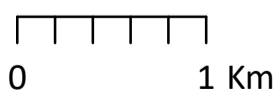
EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717
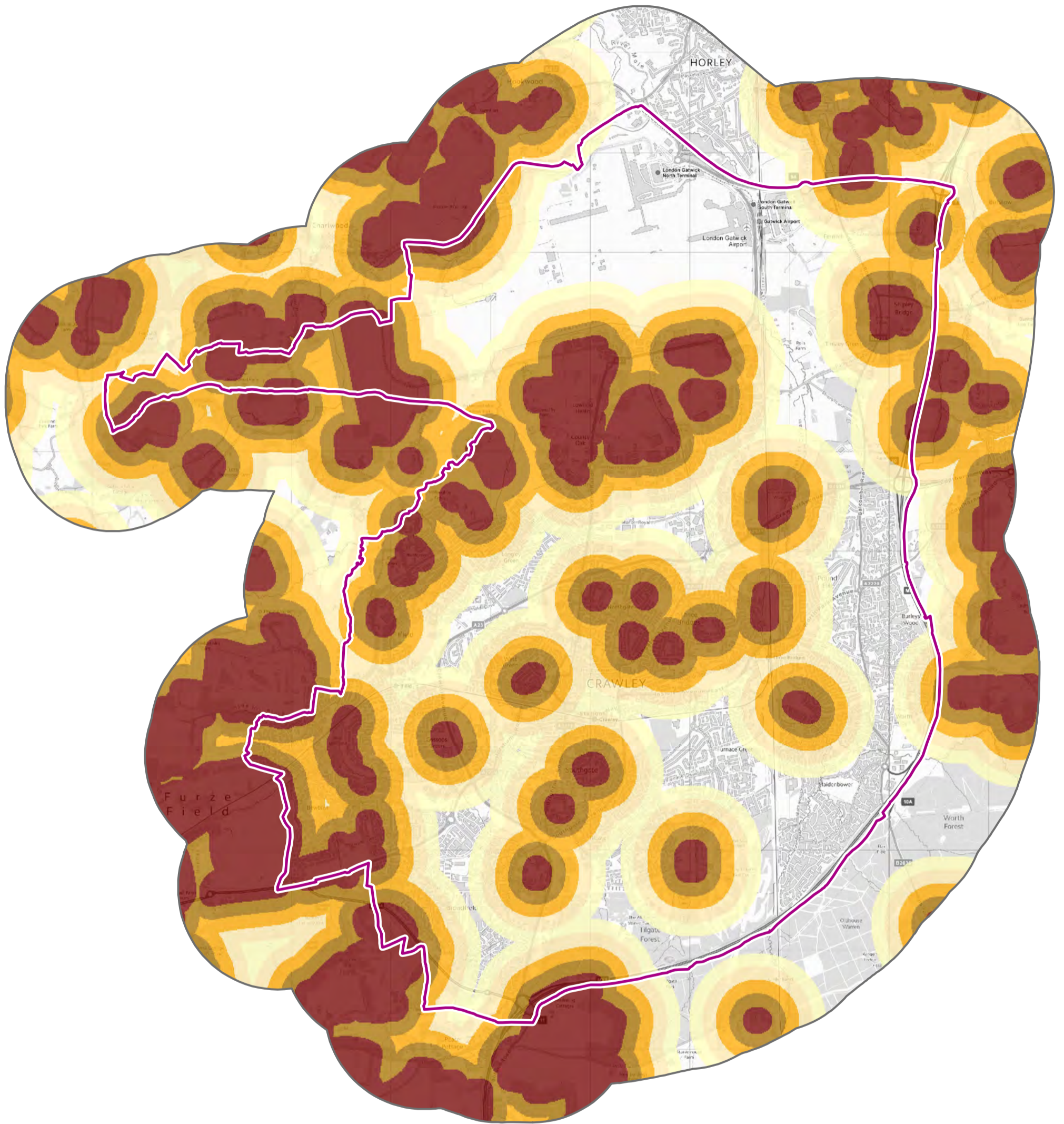
Pollination demand indicates areas of land that are expected to benefit from wild pollinators.

METHODS: Pollination demand is mapped from the locations of arable land, allotments and orchards.

LIMITATIONS: Often, depending on the input data used, arable land may be poorly mapped. Not all crops grown within areas of arable land will require pollination. If alternative data sources are available, they can be used to map the location of pollination demand. EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Pollination - Service Benefitting Areas

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

- Study Area
- Study Area + buffer

N

1:40,000

0 ___ 1 Km

Benefits to people

- A1. Highest
- A2. High
- A3. Intermediate
- A4. Low
- A5. Lowest

Sussex Wildlife Trust

Sussex Biodiversity Record Centre

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717
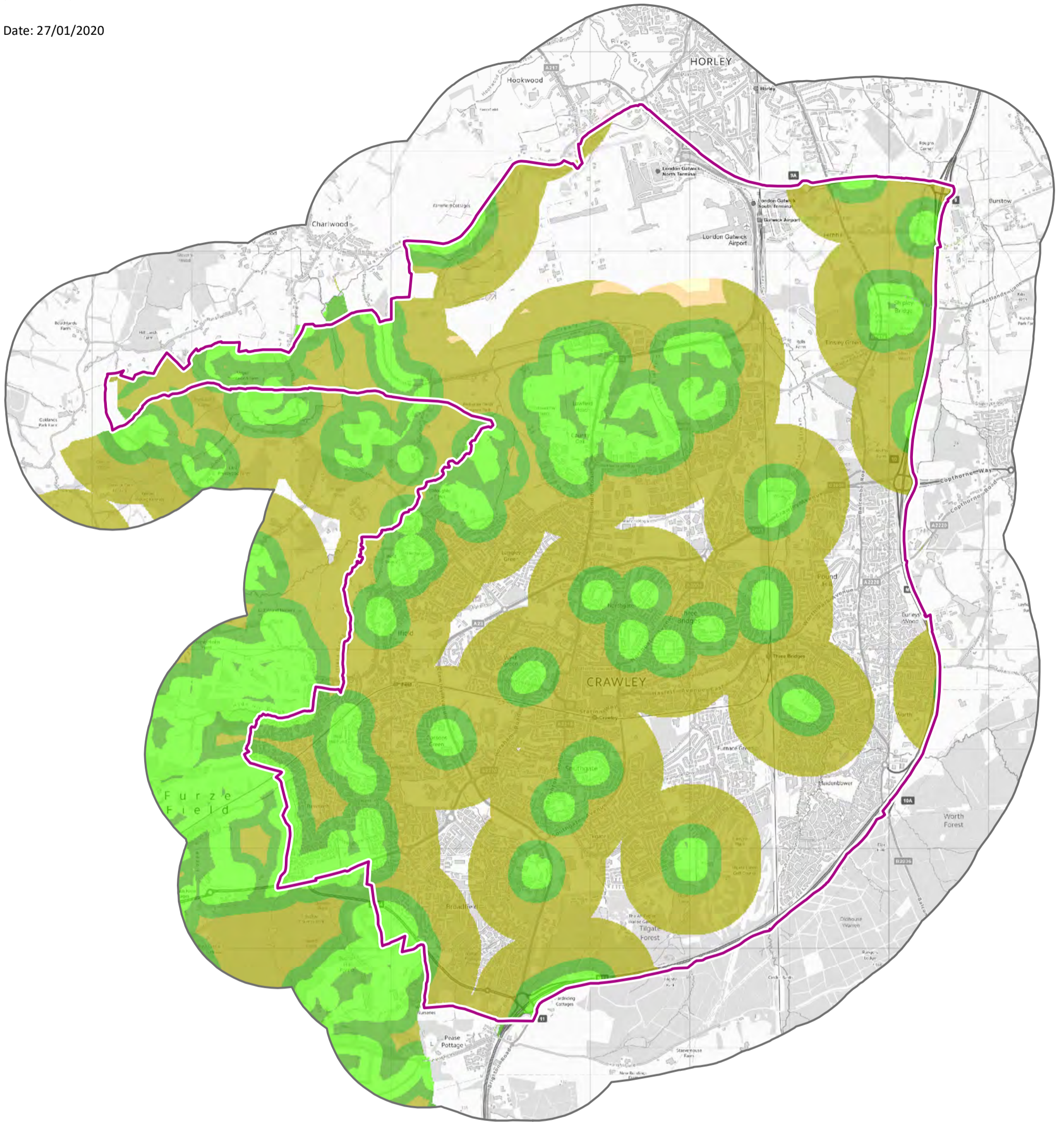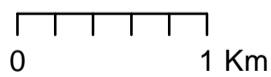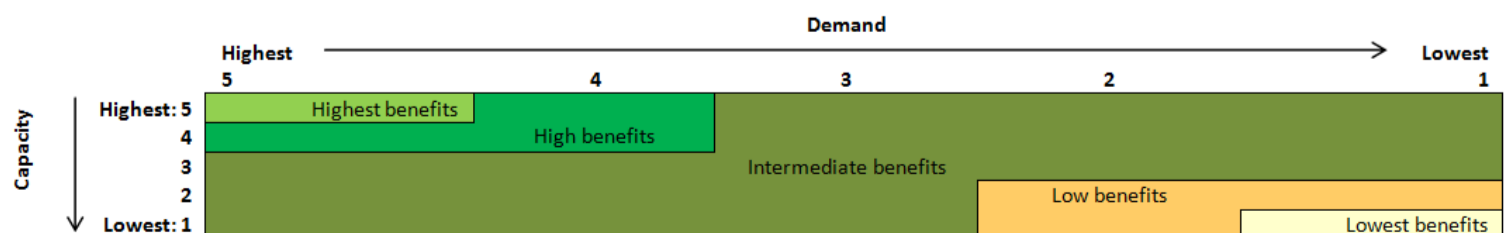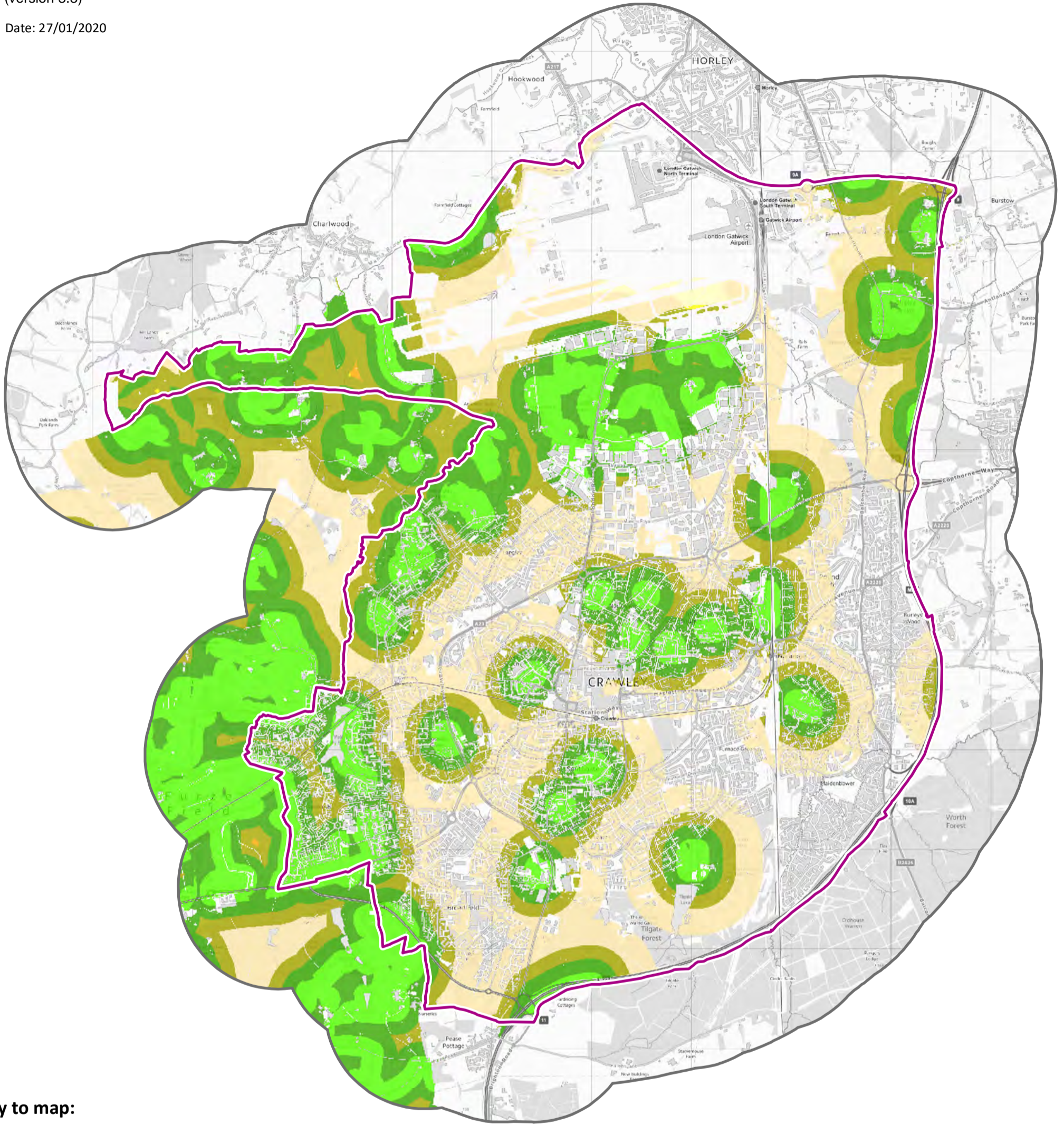
	Demand				
	Highest 5	4	3	2	Lowest 1
Highest: 5	Highest benefits				
4		High benefits			
3			Intermediate benefits		
2				Low benefits	
Lowest: 1					Lowest benefits

Capacity

Areas where crops in farmland, allotments or orchards are likely to benefit from wild pollinators from nearby semi-natural habitats.

METHODS: Capacity and Demand quintiles are overlaid to estimate the levels of benefits that may be delivered to people by the habitats currently present (see above graphic). Not all categories are always present. White space indicates no data or no service benefits.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
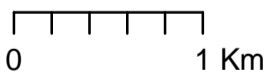
Pollination - Management Zones

Key to map:

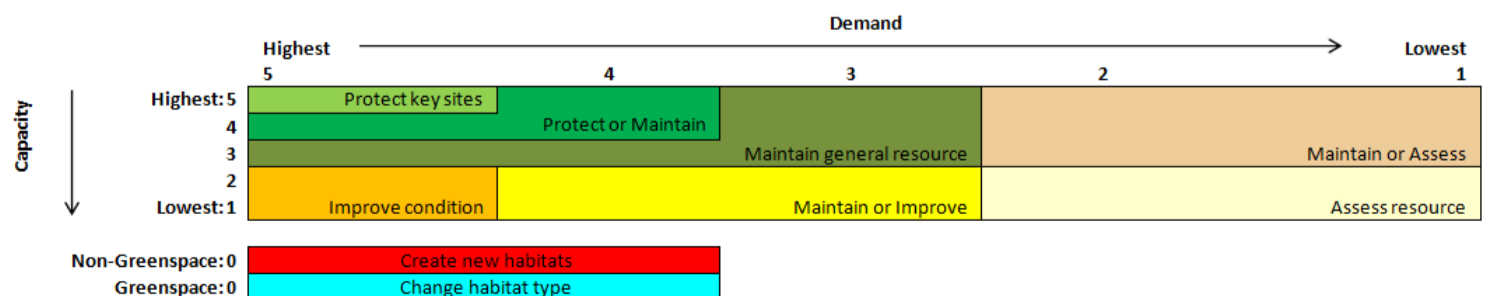- Study Area
- Study Area + buffer

Management Zones

- A1. Protect
- A2. Protect / Maintain
- A3. Maintain
- A4. Improve
- A5. Maintain / Improve
- A6. Maintain / Assess
- A7. Assess
- A8. Change habitat type: Highest Demand
- A9. Change habitat type: High Demand
- B1. Create: Highest Demand
- B2. Create: High Demand

1:40,000

0 ————————— 1 Km

N

Capacity		Demand				
		Highest 5	4	3	2	Lowest 1
Highest: 5		Protect key sites				
4			Protect or Maintain			Maintain or Assess
3				Maintain general resource		
2		Improve condition				
Lowest: 1			Maintain or Improve			Assess resource
Non-Greenspace: 0		Create new habitats				
Greenspace: 0		Change habitat type				

Areas where crops in farmland, allotments or orchards are likely to benefit from wild pollinators from nearby semi-habitats.

METHODS: Capacity and Demand quintiles are overlaid to estimate the management interventions that could maintain or increase the benefits delivered to people (see above graphic). Not all categories are always present.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Pollination - GI Assets

EcoServ-GIS

Key to map:

▭ Study Area
▭ Study Area + buffer

GI Assets

■ 80 - 100
■ 60 - 80
□ 40 - 60
□ 20 - 40
□ 1 - 20

N

1:40,000

0   1 Km

THE Wildlife TRUSTS **Sussex** Wildlife Trust

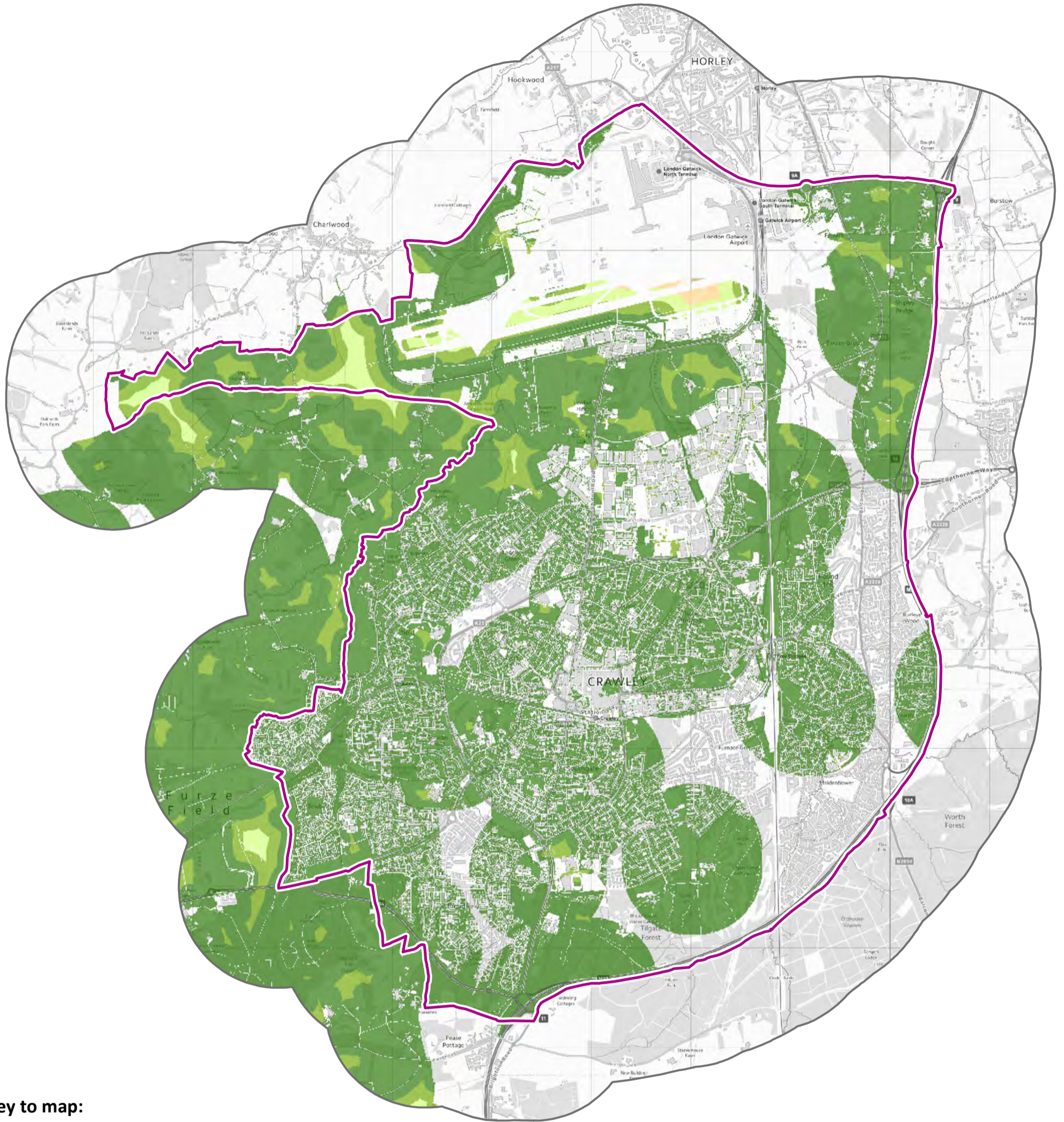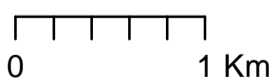**Sussex Biodiversity Record Centre**

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnance Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717

Pollination capacity reflects the ability of different ecosystems to support wild pollinators, using an estimate of likely visitation by pollinators.

METHODS: Capacity is based on the identification of habitats that may support pollinators, and likely travel distances from such habitats. This map highlights those areas of existing natural, semi-natural, Greenspace or Green Infrastructure (GI) sites where there is predicted demand for a service as well as a level of capacity to deliver the service, Those areas with capacity, but with no demand, are ommitted from this map.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

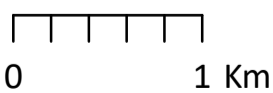## Water Purification - Capacity

Key to map:

Study Area

Study Area + buffer

Capacity Scores
- 80 - 100
- 60 - 80
- 40 - 60
- 20 - 40
- 1 - 20

1:40,000

N

0   1 Km
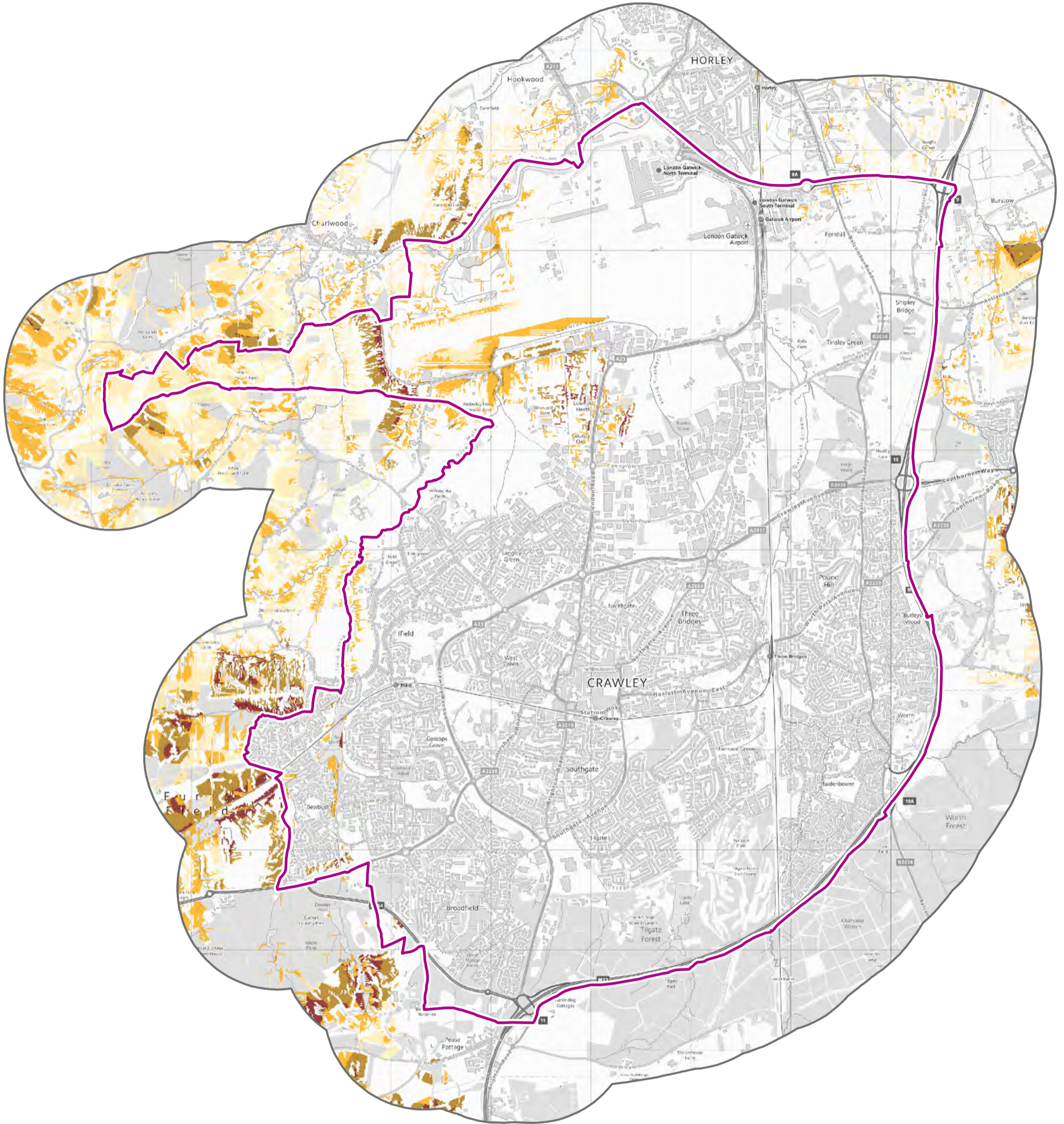
Sussex Wildlife Trust

THE wildlife TRUSTS

Sussex Biodiversity Record Centre

EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildife Trust). Contains Ordnane Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717

Areas where vegetation may help to purify water and reduce pollution impacts before reaching watercourses.

METHODS: Water Purification values per ecosystem are inferred from available literature, based on surface roughness and slope type. Habitat age and management is not considered.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Water Purification - Demand

EcoServ-GIS

Key to map:

Study Area

Study Area + buffer

Demand scores

- 80 - 100
- 60 - 80
- 40 - 60
- 20 - 40
- 1 - 20

1:40,000

0   1 Km

N
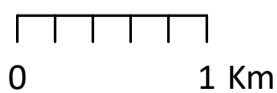
EcoServ-GIS models executed by Sussex Biodiversity Record Centre (hosted by Sussex Wildlife Trust). Contains Ordnance Survey data © Crown copyright and database rights 2020 Ordnance Survey 0100023717

Areas of land that may generate pollution risks to watercourses

METHODS: Demand is mapped based on a modified USLE equation, further adapted from a method presented in Sivertun and Prange (2003). Thresholds are applied to limit the area of mapped Demand. Defaults are applied, but can be varied with custom settings. Maximum risk distance from watercourses = 250 m. Potentially polluting land use types = Arable land, improved grassland, urban areas. Flow accumulation threshold used to identify streams, from which to map watersheds (catchments) = 20,000

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.
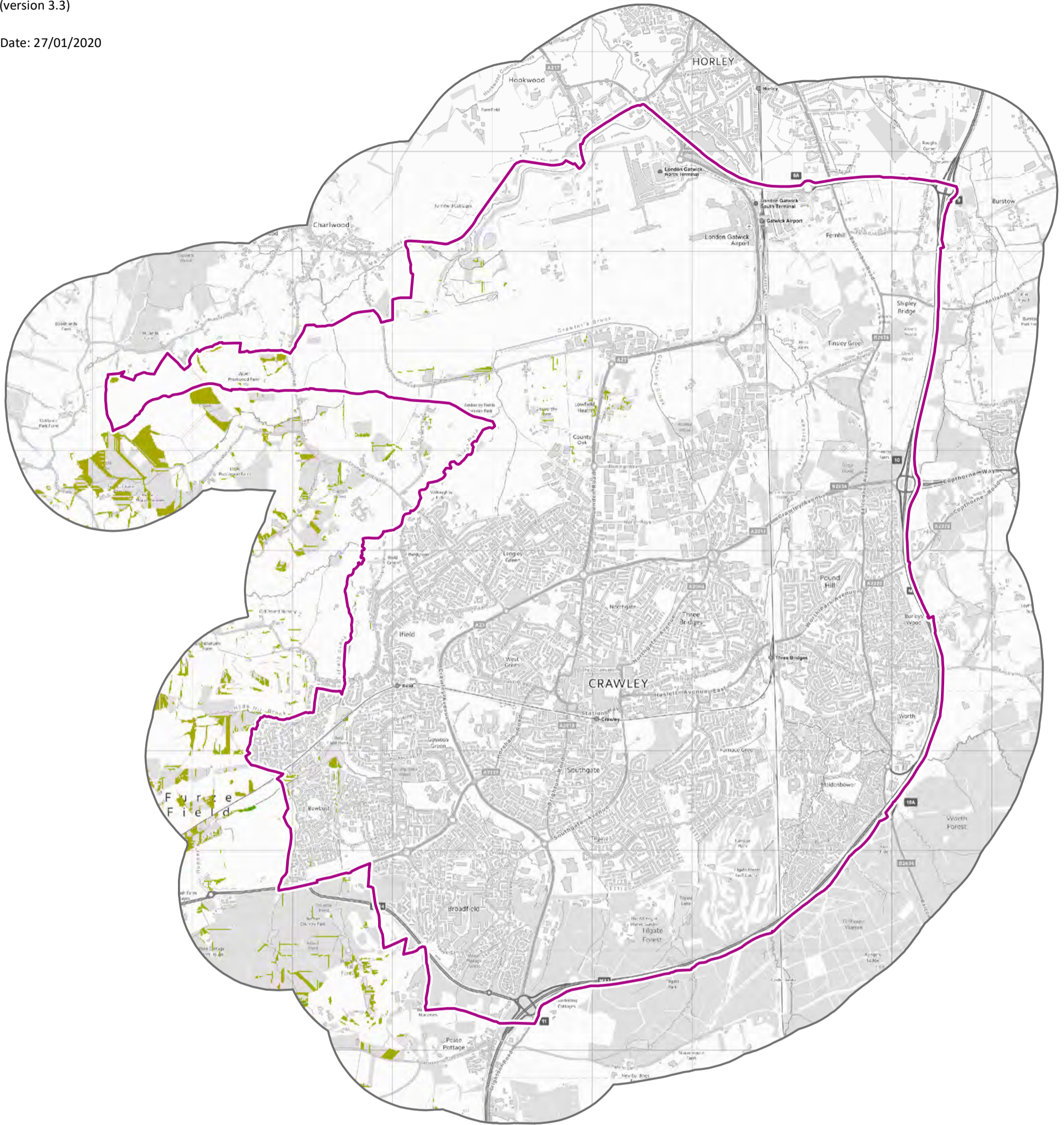
Water Purification - Service Benefitting Areas

EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

- ▢ Study Area
- ▢ Study Area + buffer

Benefits to people

- ▢ A1. Highest
- ▢ A2. High
- ▢ A3. Intermediate
- ▢ A4. Low
- ▢ A5. Lowest

1:40,000

0 ⊢⊣⊢⊣⊢ 1 Km

N

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Sussex Biodiversity Record Centre

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Capacity		Demand				
		Highest 5	4	3	2	Lowest 1
Highest: 5		Highest benefits				
4			High benefits			
3				Intermediate benefits		
2					Low benefits	
Lowest: 1						Lowest benefits

Areas where people may be benefiting from the water purification effects of vegetation near streams

METHODS: Capacity and Demand quintiles are overlaid to estimate the levels of benefits that may be delivered to people by the habitats currently present (see above graphic). Not all categories are always present. White space indicates no data or no service benefits.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Water Purification - Management Zones
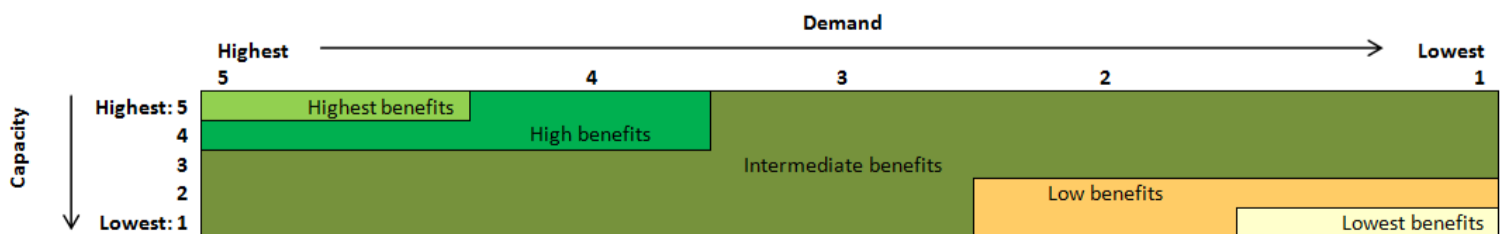
EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

Study Area

Study Area + buffer

N

1:40,000

0 — 1 Km

Management Zones

- A1. Protect
- A2. Protect / Maintain
- A3. Maintain
- A4. Improve
- A5. Maintain / Improve
- A6. Maintain / Assess
- A7. Assess
- A8. Change habitat type: Highest Demand
- A9. Change habitat type: High Demand
- B1. Create: Highest Demand
- B2. Create: High Demand

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Sussex Biodiversity Record Centre

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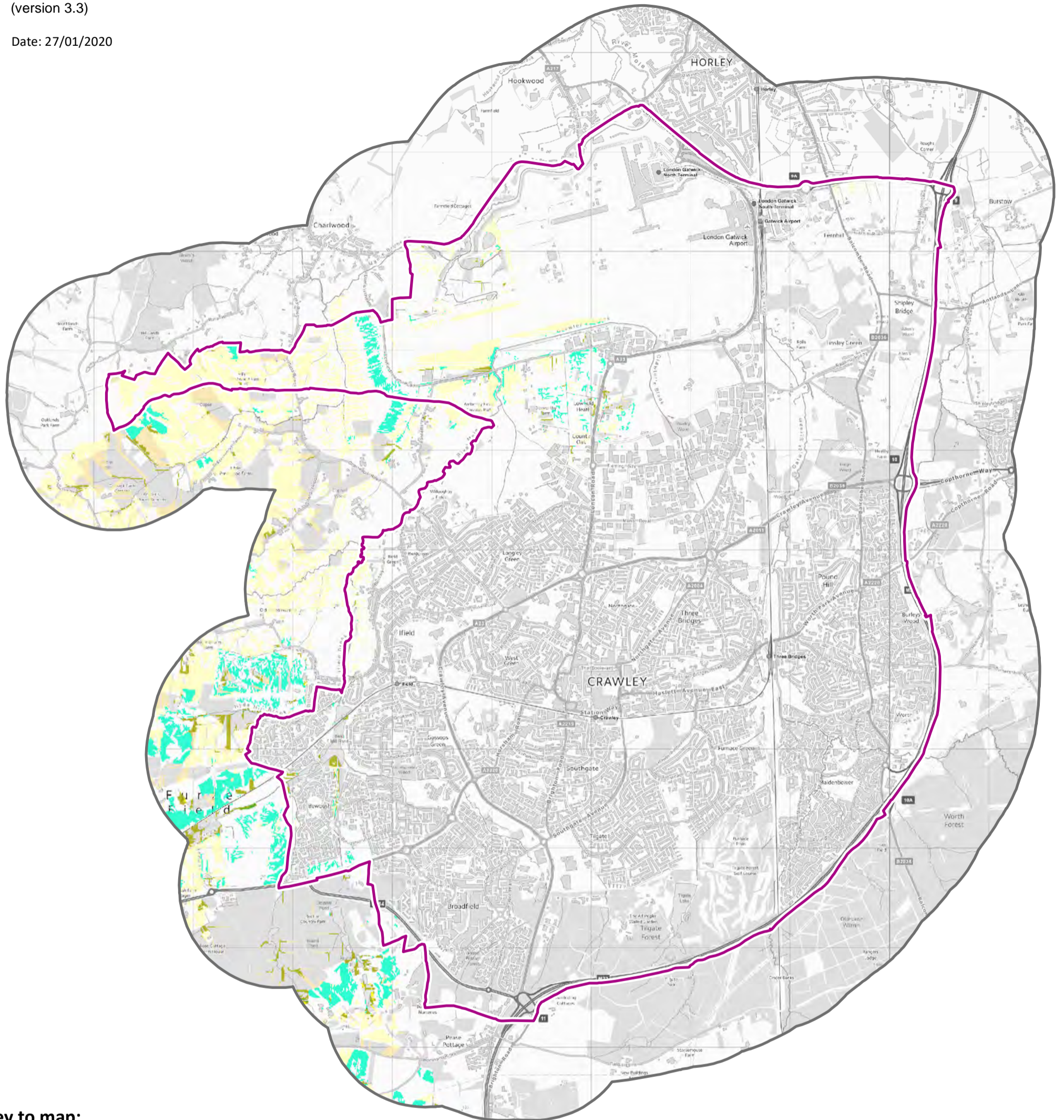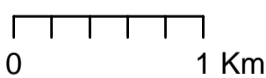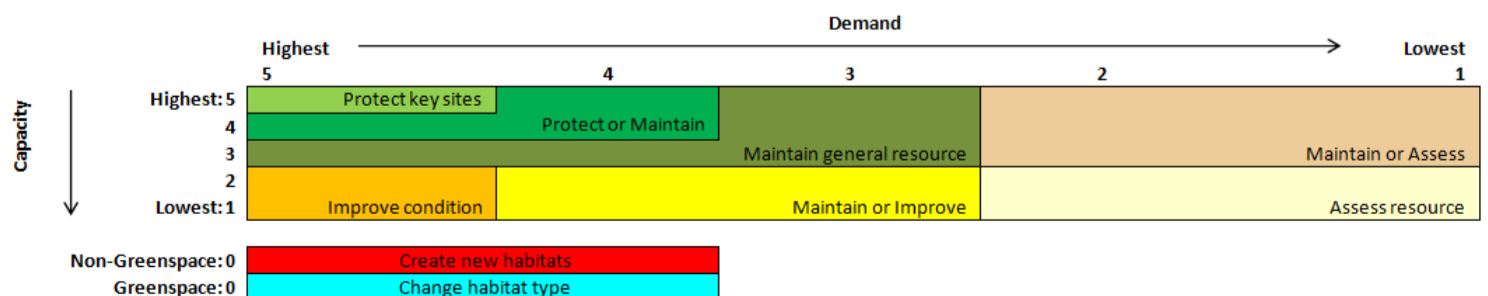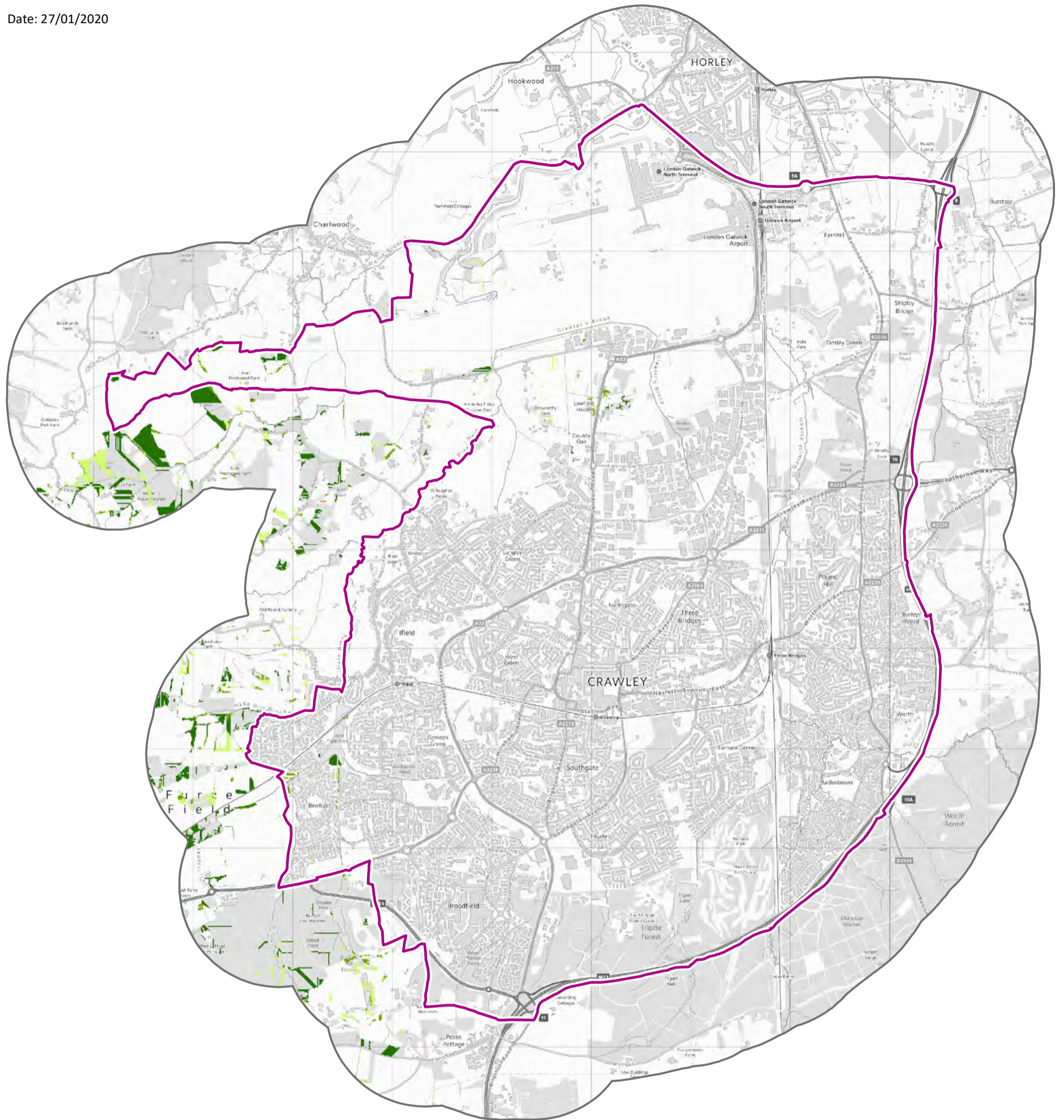
		Demand			
Highest					**Lowest**
	5	4	3	2	1
Highest: 5	Protect key sites				Maintain or Assess
4		Protect or Maintain			
Capacity 3			Maintain general resource		
2					
Lowest: 1	Improve condition	Maintain or Improve			Assess resource
Non-Greenspace: 0	Create new habitats				
Greenspace: 0	Change habitat type				

Areas where people may be benefiting from the water purification effects of vegetation near streams

METHODS: Capacity and Demand quintiles are overlaid to estimate the management interventions that could maintain or increase the benefits delivered to people (see above graphic). Not all categories are always present.

LIMITATIONS: EcoServ-GIS relies on indicators to predict levels of capacity and demand. Results are relative to the study area and cannot be compared to other areas. Local knowledge must be used to interpret what the values mean in absolute terms.

Water Purification - GI Assets
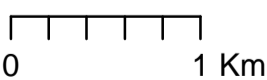
EcoServ-GIS

(version 3.3)

Date: 27/01/2020

Key to map:

— Study Area

□ Study Area + buffer

GI Assets
- ■ 80 - 100
- ■ 60 - 80
- ■ 40 - 60
- ■ 20 - 40
- ■ 1 - 20

N

1:40,000

0 — 1 Km

Sussex Wildlife Trust

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Areas where people may be benefiting from the water purification effects of vegetation near streams

METHODS: This map highlights those areas of existing natural, semi-natural, Greenspace or Green Infrastructure (GI) sites where there is predicted demand for a service as well as a level of capacity to deliver the service,

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