2020

Dumfries & Galloway Gull Counts

Annan, Dumfries, Kirkcudbright and Stranraer

September 2020

Natural Research Projects
Brathens Business Park,
Hill of Brathens, Glassel,
Banchory
AB31 4BY

01330 826880

September 2020

Natural Research (Projects) Ltd. Company registered in Scotland: SC213640
Registered Office: 14 Carden Place, Aberdeen, AB10 1UR

Report Quality Assurance Log

Date	Version	Created by	Checked by
28/09/2020	1	Blair Urquhart	Alex Ash

Contents

Introduction

1. This report describes ornithological surveys undertaken by Natural Research (Projects) Ltd (NRP) during the period 5 – 10 September 2020. This study was commissioned by Dumfries & Galloway Council. The objective of study was to record the presence and abundance of gull species in four towns located in Dumfries & Galloway: Annan, Dumfries, Kirkcudbright and Stranraer.

Survey methods

2. This snapshot survey aims to collect data on the instantaneous distribution and abundance of gulls using the survey areas. Gulls are defined as 'using' the survey area if they were either on the ground, perched on buildings or flying around. Birds clearly passing over the survey area were discounted.

3. The survey aimed to cover the ground systematically with a constant search effort. Street-level walk routes meandered to closely examine as much ground as practical. The time taken to complete a snapshot was recorded. Typically each snapshot took around 8 hours to complete.

4. The surveys were carried out during daylight hours; avoiding strong winds, heavy rain, fog and low cloud as these conditions could affect detectability of the birds. Walking, listening and scanning by eye and with binoculars were the methods used to locate the birds. All gulls were identified to species; however juvenile large gulls (i.e. herring gulls and lesser black-backed gulls) can be difficult to quickly differentiate. Where identification was not possible these gulls were recorded as immature large gulls (HG/LB).

5. Walk routes incorporated areas where roosting gulls may be present, e.g. parks, school playing fields etc. Counts were completed over 1-day at each of Annan, Kirkcudbright and Stranraer and over 2-days at Dumfries, totalling 5 days. Data were entered in the field onto recording sheets and later transferred to Excel spreadsheets.

Survey results

<u>Annan</u>

6. Four species of gull were recorded, totalling 564 individuals (Table 1). The gull population composed of 118 herring gulls, 116 lesser black-backed gulls, 253 black-headed gulls, 27 common gulls and 50 immature large gulls (HG/LB). The proportion of each species is shown in Chart 1.

7. For the purpose of this survey Annan was subdivided into eight zones; with each zone being assigned a land use class of residential, town centre, industrial or riverside (Figure 1). Within each land use class the total number of gulls counted was; residential 163, town centre 33, industrial 90 and riverside 278 (Table 2). The proportion of the total number of gulls recorded within each land use class is shown in Chart 2. The high proportion of gulls recorded in the 'riverside' zone is partly due to a flock of 180 black-headed gulls roosting in a field at Ever Holm.

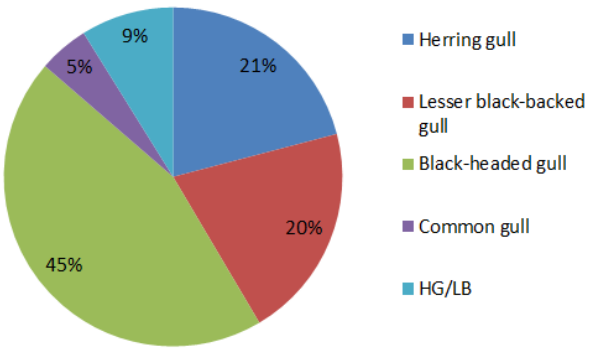


Chart 1. Proportion of gull species found in Annan.

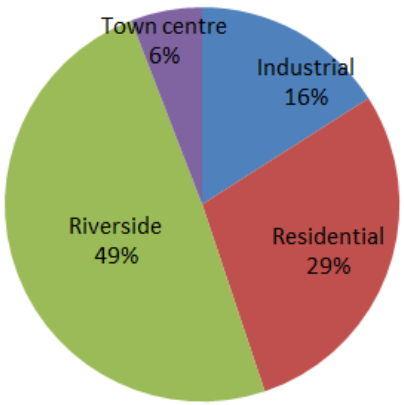


Chart 2. Proportion of gulls recorded within each land use class in Annan.

Dumfries

8. Five species of gull were recorded, totalling 620 individuals (Table 3). The gull population composed of 32 herring gulls, 366 lesser black-backed gulls, 159 black-headed gulls, 58 common gulls, 4 great black-backed gulls and 1 immature large gull (HG/LB). The proportion of each species is shown in Chart 3.

9. Dumfries was subdivided into nine zones; with each zone being assigned a land use class of either residential, town centre or industrial (Figure 2). Within each land use class the total number of gulls counted was; residential 498, town centre 81 and industrial 41 (Table 4). The proportion of the total number of gulls recorded within each land use class is shown in Chart 4. The largest count was of a flock of 111 black-headed gulls recorded on the river near the sewage works.

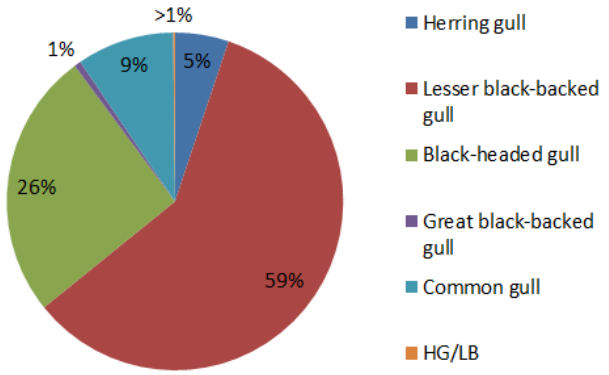


Chart 3. Proportion of gull species found in Dumfries.

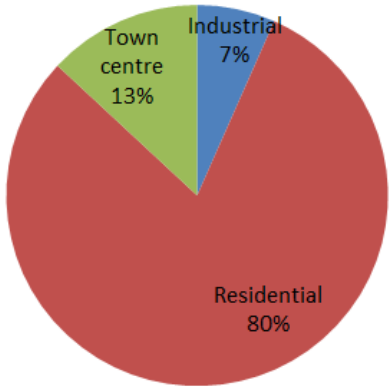


Chart 4. Proportion of gulls recorded within each land use class in Dumfries.

Kirkcudbright

10. Four species of gull were recorded, totalling 143 individuals (Table 5). The gull population composed of 93 herring gulls, 8 lesser black-backed gulls, 40 black-headed gulls and 2 common gulls. The proportion of each species is shown in Chart 5.

11. Kirkcudbright was subdivided into five zones; with each zone being assigned a land use class of either residential, town centre or industrial (Figure 3). Within each land use class the total number of gulls counted was; residential 34, town centre 74 and industrial 35 (Table 6). The proportion of the total number of gulls recorded within each land use class is shown in Chart 6. Additional to those gulls reported above, large numbers of gulls were recorded roosting on the estuary at Castledykes, these included 100 lesser black-backed gulls, 40 black-head gulls and 20 herring gulls.

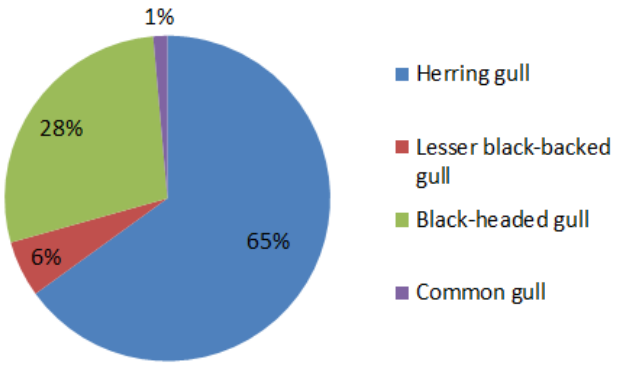


Chart 5. Proportion of gull species found in Kirkcudbright.

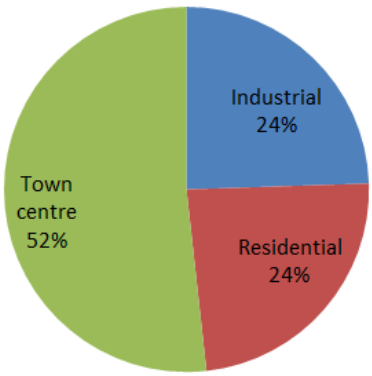


Chart 6. Proportion of gulls recorded within each land use class in Kirkcudbright.

Stranraer

12. Five species of gull were recorded, totalling 597 individuals (Table 7). The gull population composed of 449 herring gulls, 8 lesser black-backed gulls, 83 black-headed gulls, 56 common gulls and one great black-backed gull. The proportion of each species is shown in Chart 7.

13. Stranraer was subdivided into six zones; with each zone being assigned a land use class of harbour, residential, town centre or industrial (Figure 4). Within each land use class the total number of gulls counted was; harbour 196, residential 277, town centre 65 and industrial 59 (Table 8). The proportion of the total number of gulls recorded within each land use class is shown in Chart 8. Additional to those gulls reported above, large numbers of gulls were also present along the beach front, involving 180 black-headed gulls, 85 herring gulls and 121 common gulls.

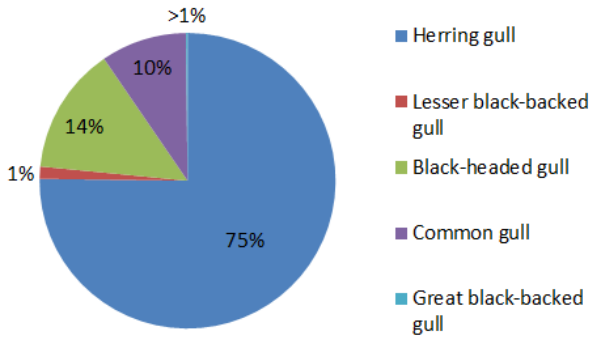


Chart 7. Proportion of gull species found in Stranraer.

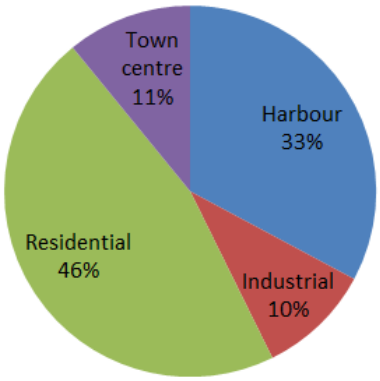


Chart 8. Proportion of gulls recorded within each land use class in Stranraer.

Conclusion

14. Gulls, particularly herring gull and lesser black-backed gulls, are becoming an increasingly common roof-nesting bird in urban areas of the UK, and many individual birds show little fear of humans. These urban gulls are now found all year round in the streets and gardens of Britain, due to the presence of anthropogenic food resources, warmer temperatures, ample nesting sites, lower predation rates and potentially lower flight costs.

15. Our results provide a single ‘snapshot’ of the distribution and number of gulls in and around the streets of Annan, Dumfries, Kirkcudbright and Stranraer during the non-breeding season. Comparisons between breeding and non-breeding season populations cannot be made as outside of the breeding season, the requirement for secure nest sites is absent and gulls generally become more widespread. They still require secure roosting sites that are within range of suitable foraging areas. As birds are not tied to attending eggs or young at this time, wintering gulls are able to range more widely and will not necessarily use the same roosts and foraging areas throughout the non-breeding season. Hence, some individual gulls may make more transitory use of urban areas in winter. As such, the number, species and use of different land use classes may vary significantly throughout the winter period. Therefore, to better understand the number and distribution of gulls during the non-breeding season multiple snapshot surveys would need to be undertaken across the winter period.

16. Urban gulls can be a year-round problem for the residents of town and cities, but they become particularly troublesome in the approach to the breeding season. During this time the birds' activity increases and they become noisier and more aggressive in their behaviour. The change in behaviour is particularly noticeable once the gulls have laid their eggs and while fledglings are present in the nest. The majority of complaints received about gulls are during this period. Therefore, to inform and improve the effectiveness of gull management we recommend that monitoring of the breeding sites of large gulls continues in 2021 with surveys commencing in early April. Further discussion of potential management techniques is presented in Appendix 1.

17. Furthermore, consideration should be given to the funding of longer-term studies to better understand urban gull population dynamics such as juvenile dispersal, immigration/emigration from breeding colonies and identification of important feeding resources. Such studies could, for example, involve colour ringing of juveniles and/or GPS tracking. The issue of urban gulls is not just a local one, but a regional one. If the problems associated with urban breeding are to be understood and dealt with, regional strategies will have to be formed.

Tables

Table 1. Count of gull species by zone in Annan

Species	Zone								Total
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
Black-headed gull	10	180	13	28		19	2	1	**253**
Common gull		20	1			6			**27**
Herring gull	3	13	24	6	16	23	7	26	**118**
HG/LB	14	14	3	4	5	7	3		**50**
Lesser black-backed gull	2	11	10	2	12	35	31	13	**116**
Total	**29**	**238**	**51**	**40**	**33**	**90**	**43**	**40**	**564**

Table 2. Gull counts by land use class in Annan

Industrial	**Count**
Lesser black-backed gull	35
Herring gull	23
Black-headed gull	19
Large immature gull	7
Common gull	6
Total	90
Residential	
Herring gull	60
Lesser black-backed gull	56
Black-headed gull	26
Large immature gull	20
Common gull	1
Total	163
River-side	
Black-headed gull	208
Common gull	20
Herring gull	19
Large immature gull	18
Lesser black-backed gull	13
Total	278
Town centre	
Herring gull	16
Lesser black-backed gull	12
Large immature gull	5
Total	33

Table 3. Count of gull species by zone in Dumfries

Species	Zone									Total
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	
Black-headed gull	1		12				111	35		**159**
Common gull				1			57			**58**
Great black-backed gull	1			1			2			**4**
Herring gull	10		1	3	2	1	2	12	1	**32**
HG/LB								1		**1**
Lesser black-backed gull	69	2	14	27	37	62	67	68	20	**366**
Total	**81**	**2**	**27**	**32**	**39**	**63**	**239**	**116**	**21**	**620**

Table 4. Gull counts by land use class in Dumfries

Industrial	
Lesser black-backed gull	39
Herring gull	2
Total	41
Residential	
Lesser black-backed gull	258
Black-headed gull	158
Common gull	58
Herring gull	20
Great black-backed gull	3
HG/LB	1
Total	498
Town centre	
Lesser black-backed gull	69
Herring gull	10
Black-headed gull	1
Great black-backed gull	1
Total	81

Table 5. Count of gull species by zone in Kirkcudbright						
Species	**Zone**					**Total**
	1	**2**	**3**	**4**	**5**	
Black-headed gull	30	2		8		**40**
Common gull		2				**2**
Herring gull	44	12	8	22	7	**93**
Lesser black-backed gull		2	1	5		**8**
Total	**74**	**18**	**9**	**35**	**7**	**143**

Table 6. Gull counts by land use class in Kirkcudbright	
Industrial	
Herring gull	22
Black-headed gull	8
Lesser black-backed gull	5
Total	35
Residential	
Herring gull	27
Lesser black-backed gull	3
Black-headed gull	2
Common gull	2
Total	34
Town centre	
Herring gull	44
Black-headed gull	30
Total	74

Table 7. Count of gull species by zone in Stranraer

Species	Zone						Total
	1	**2**	**3**	**4**	**5**	**6**	
Black-headed gull	1	54		12	6	10	**83**
Common gull				44	12		**56**
Great black-backed gull		1					**1**
Herring gull	63	138	56	42	85	65	**449**
Lesser black-backed gull	1	3	3	1			**8**
Total	**65**	**196**	**59**	**99**	**103**	**75**	**597**

Table 8. Gull counts by land use class in Stranraer

Harbour	
Herring gull	138
Black-headed gull	54
Lesser black-backed gull	3
Great black-backed gull	1
Total	196
Industrial	
Herring gull	56
Lesser black-backed gull	3
Total	59
Residential	
Herring gull	192
Common gull	56
Black-headed gull	28
Lesser black-backed gull	1
Total	277
Town centre	
Herring gull	63
Black-headed gull	1
Lesser black-backed gull	1
Total	65

Appendix 1

Urban gull control measures

18. All species of gull are protected under the Wildlife and Countryside Act 1981. In Scotland, the Wildlife and Countryside Act 1981 has been amended by the Nature Conservation (Scotland) Act 2004. This makes it illegal to intentionally or recklessly injure or kill any gull or damage or destroy an active nest or its contents or prevent gulls from accessing their nest.

19. However, the law recognises that in certain circumstances control measures may be necessary. The law does not permit control measures for gulls if they are causing noise nuisance or simply damaging property. NatureScot (previously Scottish Natural Heritage) can issue licences, permitting nests to be destroyed or even birds to be killed if there is no non-lethal solution and if it is done to prevent serious damage to agriculture, the spread of disease, to preserve public health and safety and air safety, or to conserve other wild birds.

20. The increase in gulls in the urban environment is linked to an increase in conflicts with people, resulting in perceived problems such as aggression, mess, noise and damage to buildings and property.

21. Unfortunately there is no simple solution to mitigate this conflict. Across towns and cities in the UK a range of controls measures have been implemented, some of which seem to be effective locally, but are temporary and are not effective on a larger scale. When developing control measures, it should be remembered that urban nesting gulls are not only using the urban environment but also areas outside towns and cities.

22. The most effective measures to discourage gulls nesting in urban areas are to reduce access to food and the attractiveness or availability of breeding sites. There are, therefore, three potential intervention points which could be exploited. These are

    - Disruption of nesting sites;
    - Disruption of the reproductive cycle; and
    - Control of food sources.

<u>Manipulation of nest sites</u>

23. Netting and physical blocking of nest sites are the most effective ways of keeping gulls off particular roofs or parts of buildings. However, if it is wrongly situated or poorly designed, the gulls will take advantage. If netting is not maintained or the wrong specification used

then gulls and other birds could get entangled and die a lingering death. Displacement from nest sites will always result in relocation. If the gulls cannot breed on their chosen roofs they will find alternatives thus creating problems for others elsewhere.

24. While large scale attempts to reduce gull breeding sites in towns and cities is unlikely to be successful, small scale targeting of nests on those sites causing particular problems can be successful. In such cases nest material should be removed and bird proofing carried out during the winter months.

Manipulation of reproductive cycle

25. Culling of adult gulls - Expert opinion is that a large scale cull of gulls is likely to be ineffective and the practical aspects of carrying out a cull, in an urban area, are extremely difficult within the existing legislation.

26. Egg smashing and nest raking – Such methods simply result in the gulls rebuilding and relaying. However, continual, daily nest removal throughout the season will effectively prevent gulls from nesting on a roof; however this would be time consuming and expensive.

27. Disturbing gulls - There is a variety of methods of disturbing or discouraging birds from particular locations e.g. using birds of prey, bird scarers or the playing of sudden, loud noises or distress calls. None of these methods have been successful or practical in the long term in urban areas. While these methods appear to work in the short term, it is not long before the gulls get used to them and ignore them.

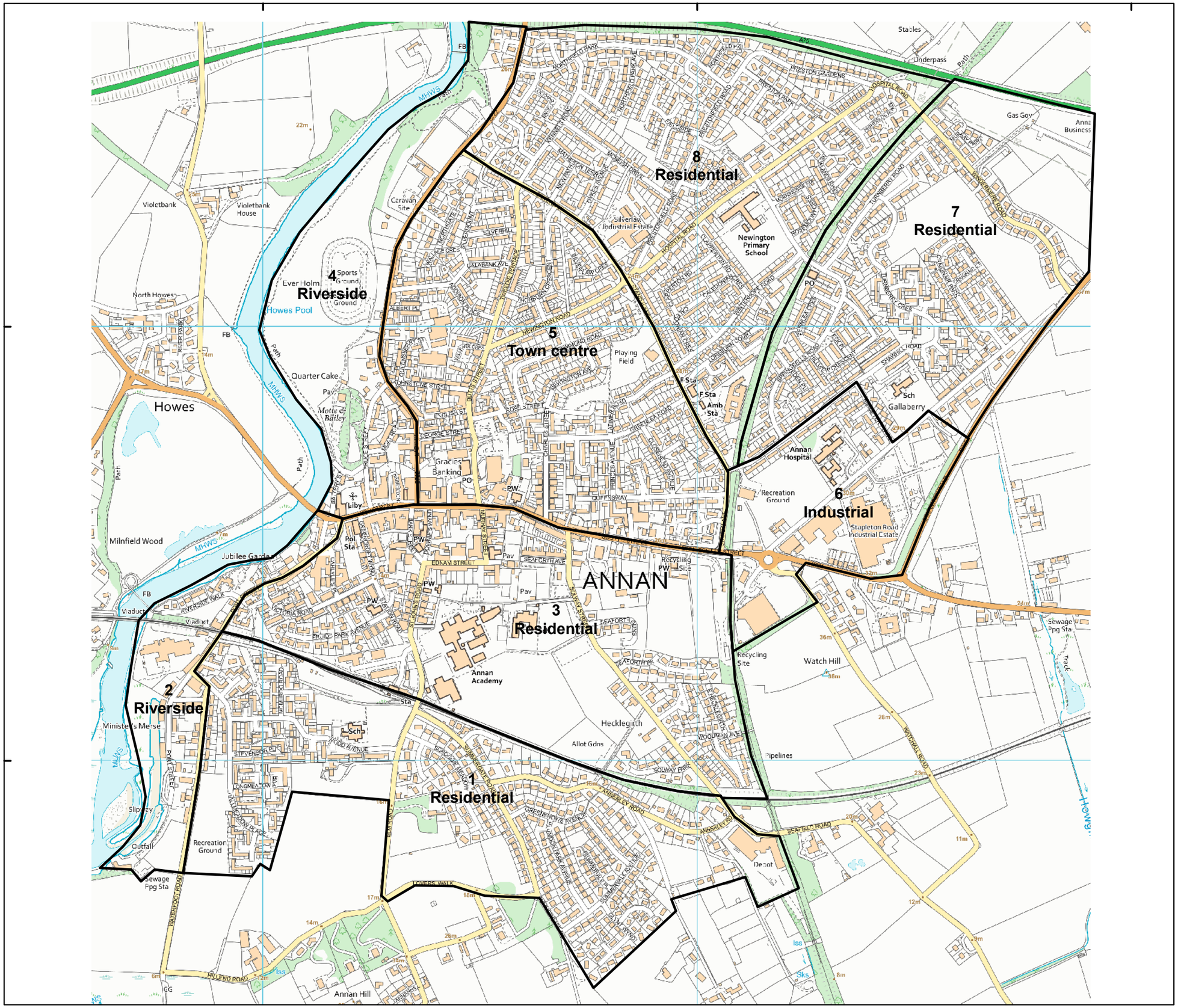
28. Treatment of eggs – noise from gulls is moderate during courtship but is at its highest (along with aggression towards humans) once chicks have hatched. Incubation is generally a quiet affair and birds are discreet and often rather secretive. Therefore, the sterilising of eggs will, effectively, encourage the adults to incubate longer than the normal 28 to 30 days. After an extended (failed) incubation period, pairs will abandon the season's breeding attempt. The treatment of gull's eggs with liquid paraffin BP is a cheap and efficient way of preventing hatching. If done correctly and at the right time of year, this technique is 100 % effective in preventing the hatching of eggs. This method will not remove the gulls and will need to be undertaken every year. However, it does answer some of the more pressing complaints by significantly reducing noise.

Food Source Controls.

29. Large gulls are opportunistic feeders and will take advantage of whatever becomes available. They will scavenge waste bins and look for food. If it is edible, they will eat it. Measures that would help reduce the prospects of gulls scavenging for waste food include, but not limited to:

    - Improved and more frequent street hygiene, particularly around takeaway food outlets;
    - Increase in frequency of refuse collection to minimise the time that waste is left kerbside awaiting collection and prevent litter bins over-flowing;
    - Provision of 'tamper-proof' litter bins;
    - Use of stronger 'peck proof' plastic bags by households and businesses;
    - Dissuading the public from feeding gulls at home or in areas such as parks and other open spaces through communication and perhaps environmental warden interventions; and
    - Educating the public and businesses, through an environmental warden, that gulls are attracted to areas where food is plentiful and that food waste should be properly stored and/or disposed of using the bins provided.

30. Whilst control of human food waste would be beneficial, gulls can fly significant distances for food which gives them access to the surrounding farmland and landfill sites in Dumfries & Galloway. They move widely and are perfectly capable of making a round trip of 100 km in search of food in only a few hours.



© Crown copyright and database rights 2020. Ordnance Survey 0100031673

nrp NATURAL RESEARCH PROJECTS LIMITED

Key

Zone boundary

Date produced: 22/09/2020

Source: NRP LTD

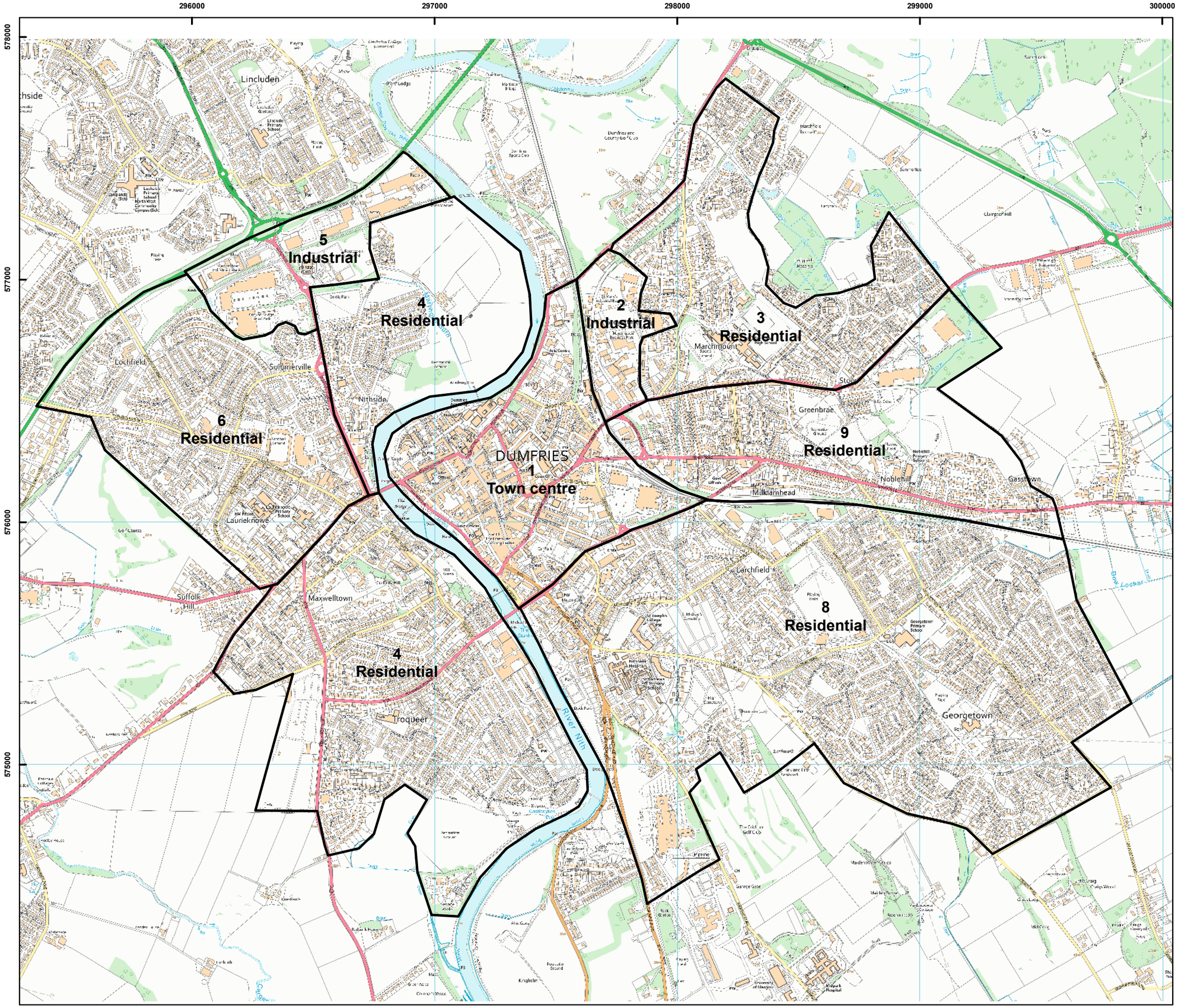
N

0 0.125 0.25 0.5 km

Figure no.1

Annan zones and land use classes

Dumfries and Galloway Gull Surveys



nrp NATURAL RESEARCH PROJECTS LIMITED

Key

Zone boundaries

Date produced: 22/09/2020
Source: NRP LTD

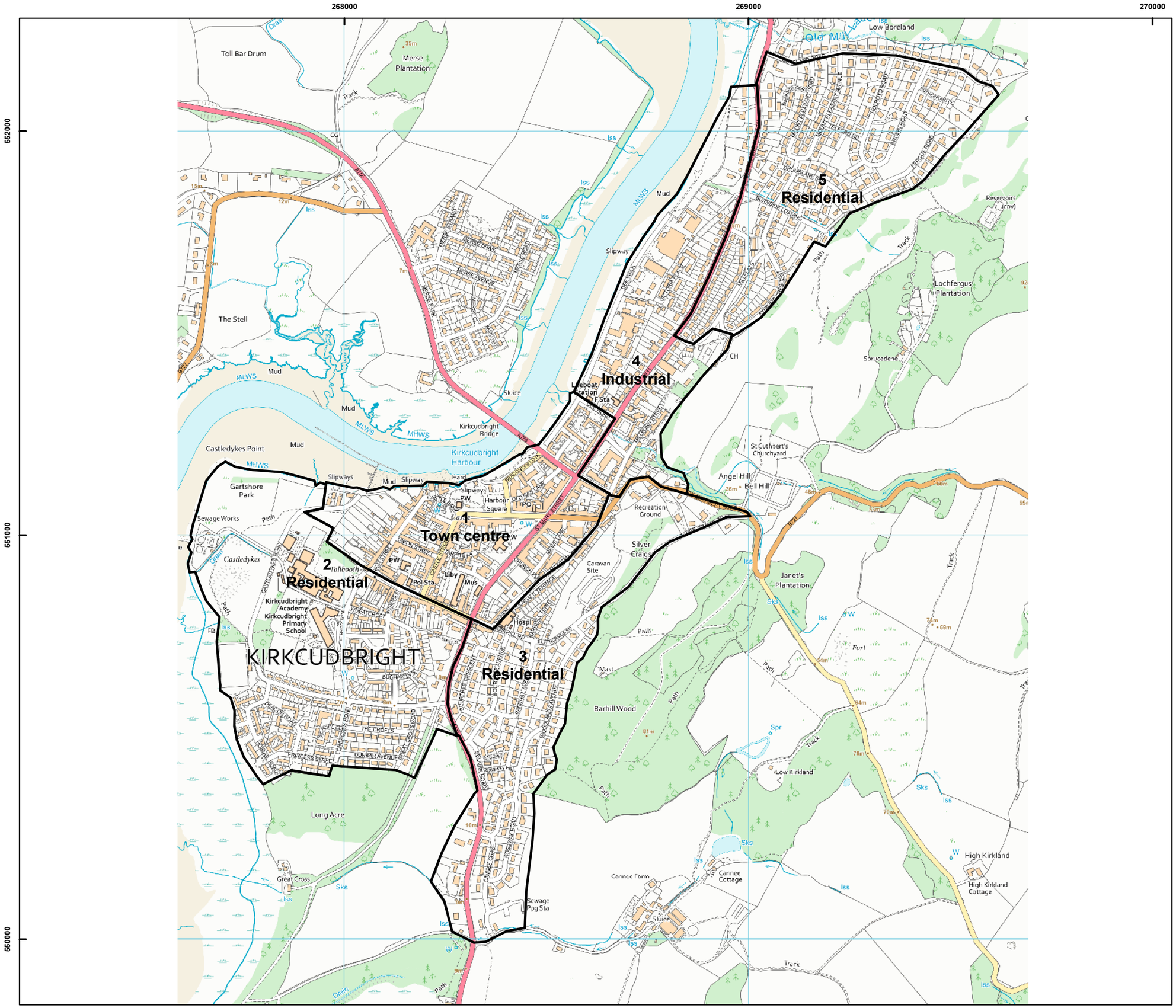
N

0 0.125 0.25 0.5 km

Figure no.2

Dumfries zones and land classes

Dumfries and Galloway Gull Surveys



© Crown copyright and database rights 2020. Ordnance Survey 0100031673

nrp NATURAL RESEARCH PROJECTS LIMITED

Key

Zone boundary

Date produced: 22/09/2020

Source: NRP LTD

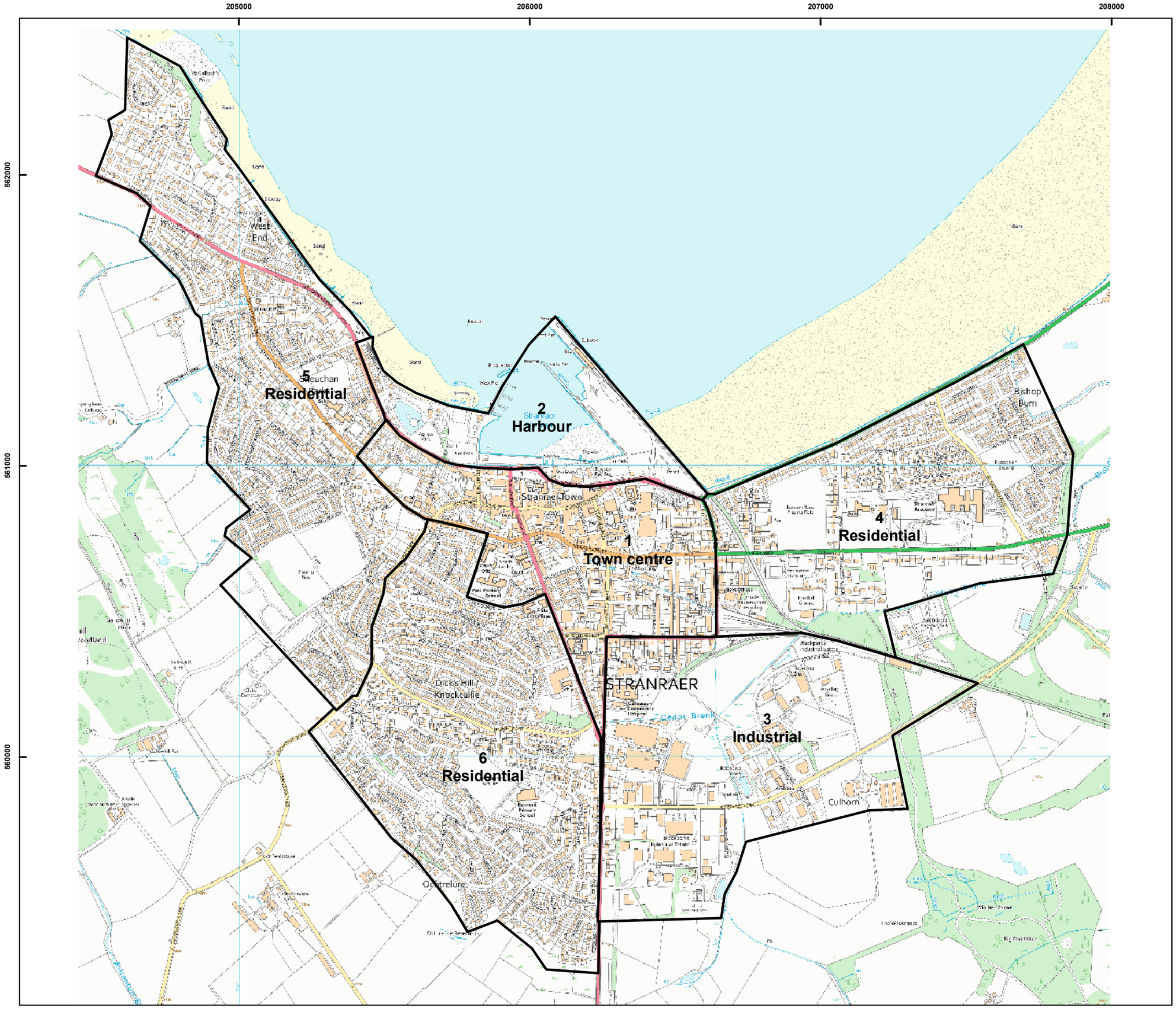
N

0 0.125 0.25 0.5 km

Figure no.3

Kirkcudbright zones and land use classes

Dumfries and Galloway Gull Surveys



nrp NATURAL RESEARCH PROJECTS LIMITED

Key

Zone boundary

Date produced: 22/09/2020

Source: NRP LTD

N

0 0.125 0.25 0.5 km

Figure no.4

Stranraer zones and land use classes

Dumfries and Galloway Gull Surveys