

Thoughts on output geography for the 2011 census

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Martin Callingham
Visiting Professor
Department of Geography
Birkbeck College
University of London

Primary wish-list

Super Output Areas should stay the same for better population tracking over time

Output areas should remain the same where possible - changes should be mergers or splits

This implies keeping the household target at 125

There should be a postcode to OA look-up table

A look-up table should show the relationship between the 2011 and the 2001 OAs structures

In spite of all this, free access is very important and ONS should have a plan B if OS become obnoxious

Real wish-list

Edges

Holes

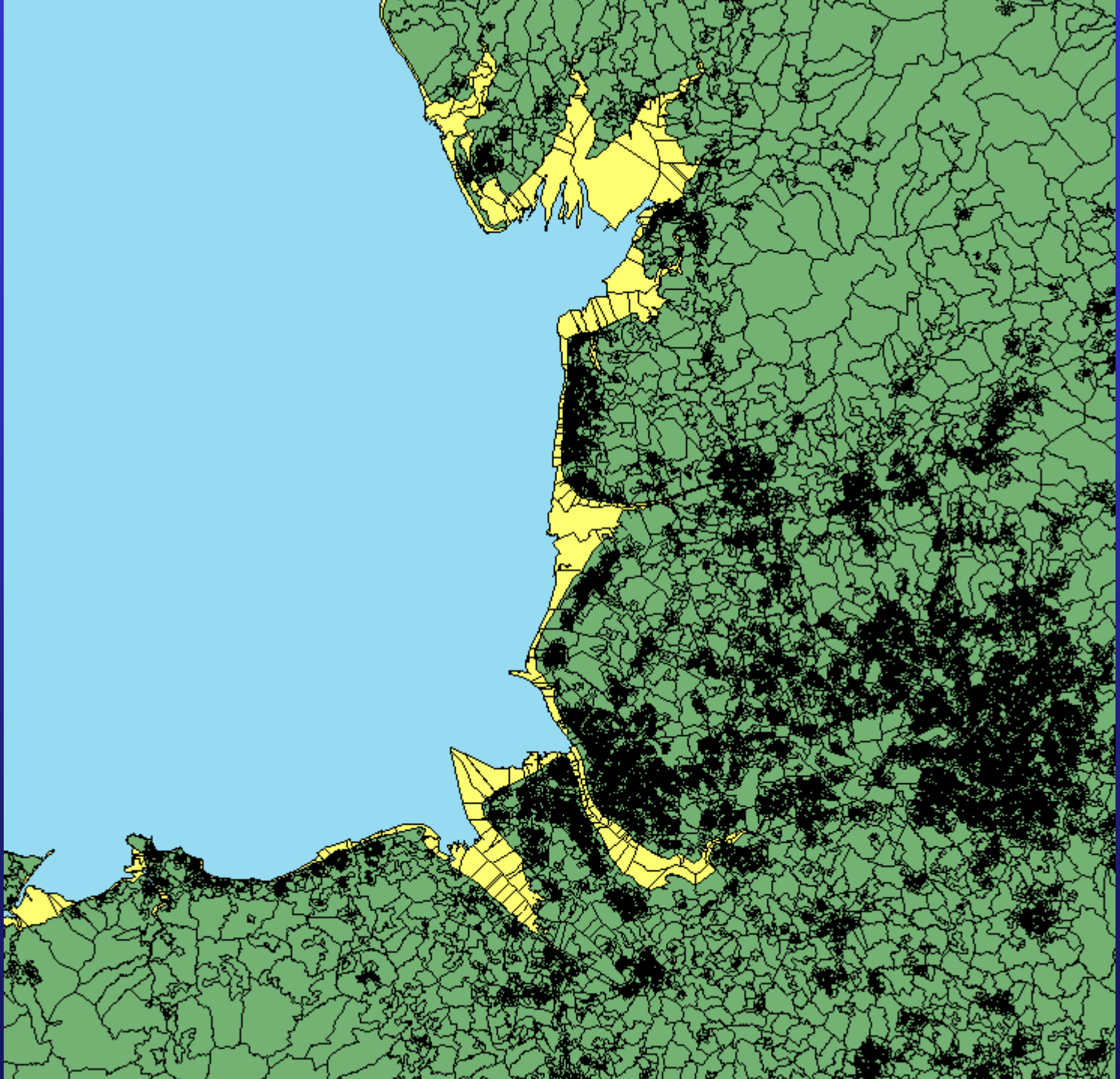
Classification as part of

Outline of the UK

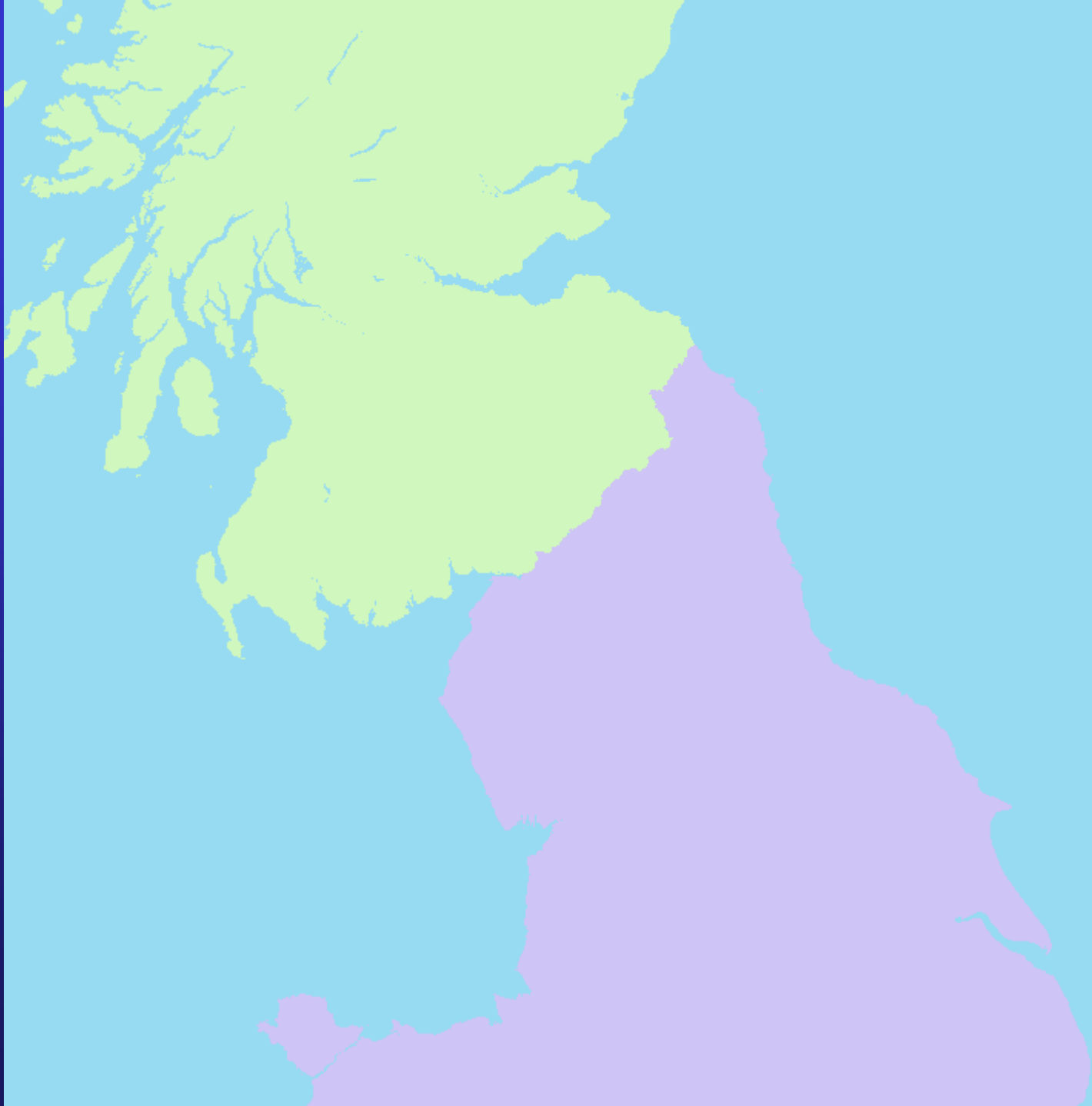


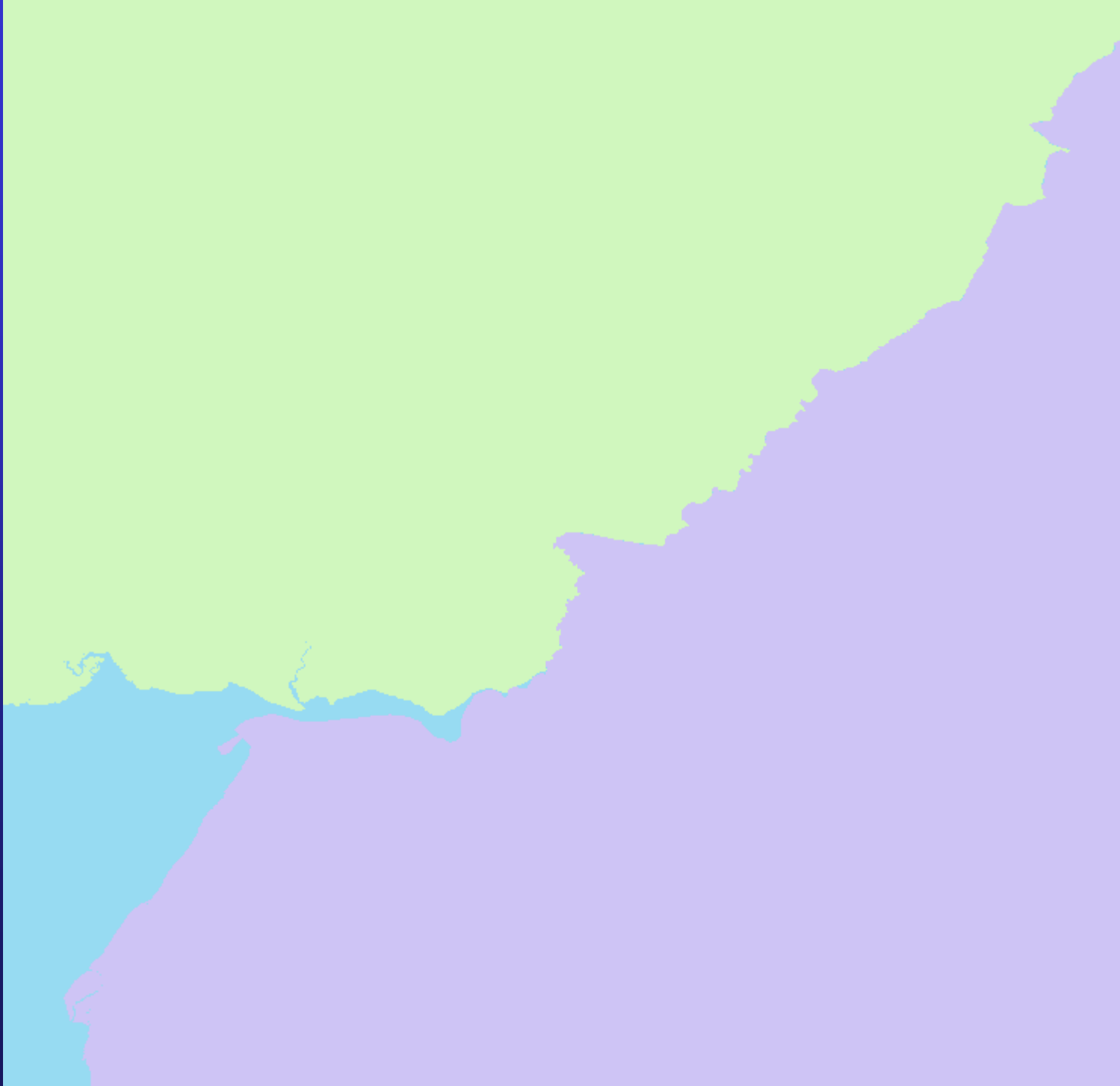




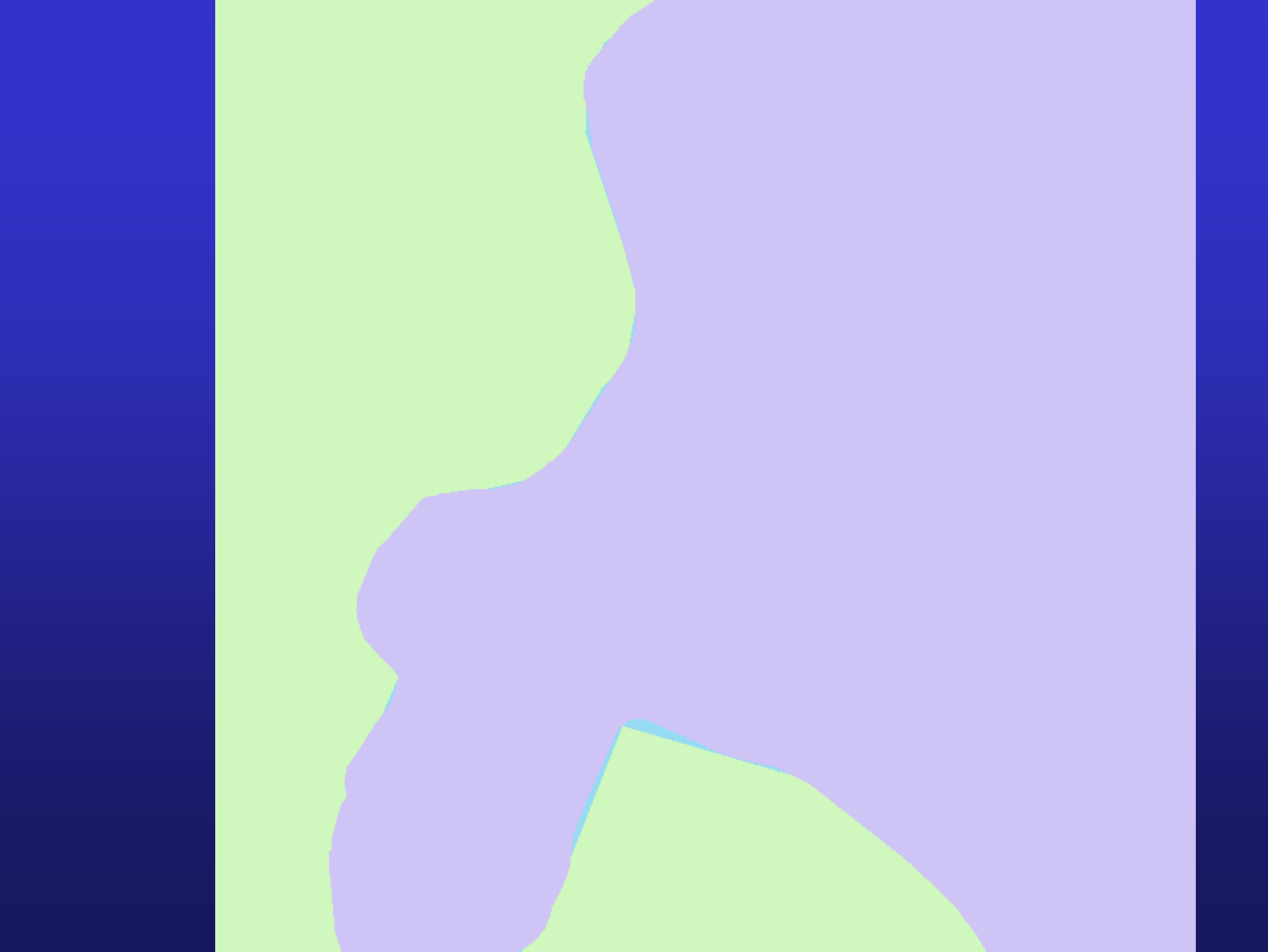


Scotland and England should join









Population density variation

Sample of 10,000 OAs from Scotland

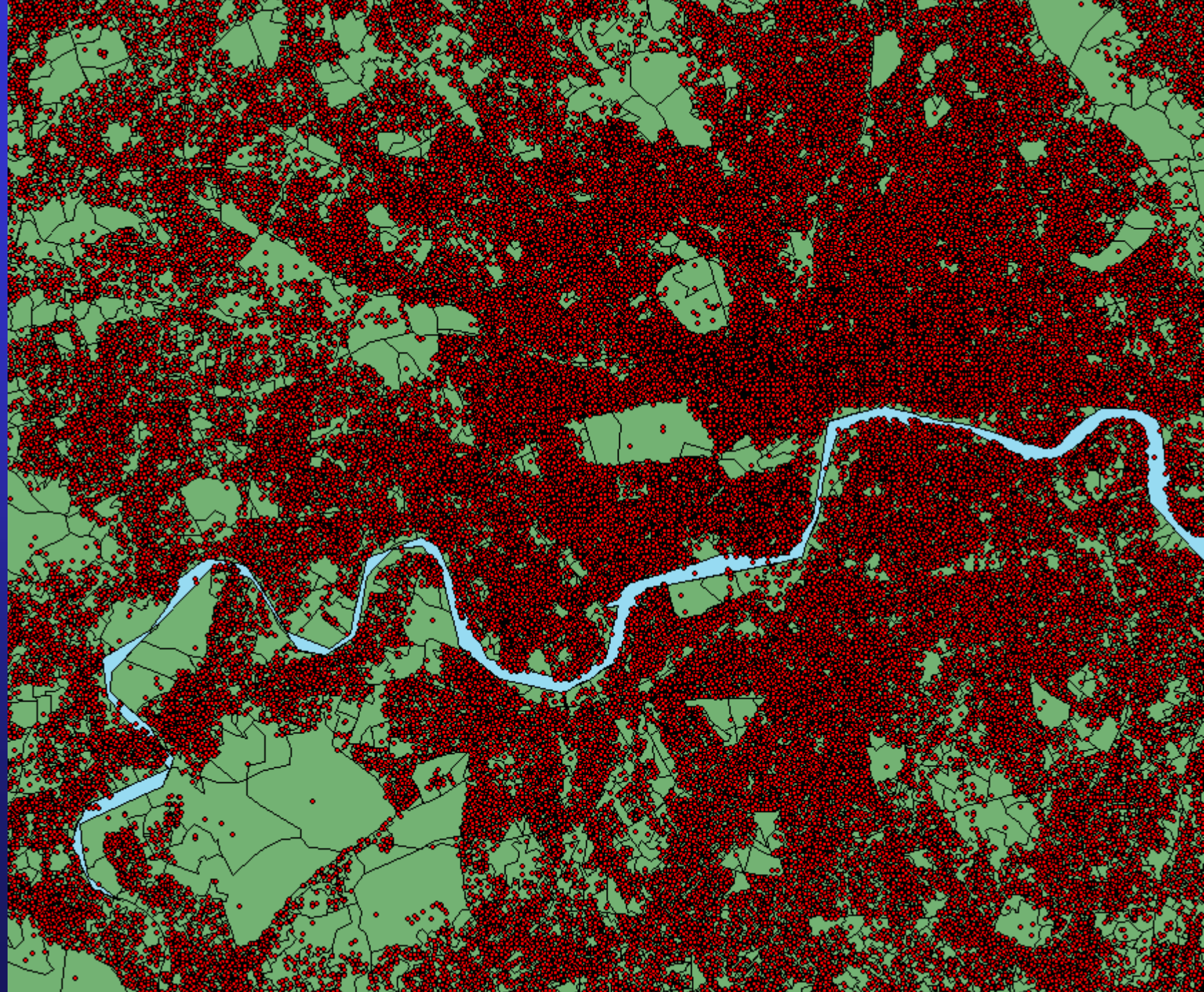
Population ratio 1: 18

Density ratio 1: 1,264,600

Isolate areas of no population

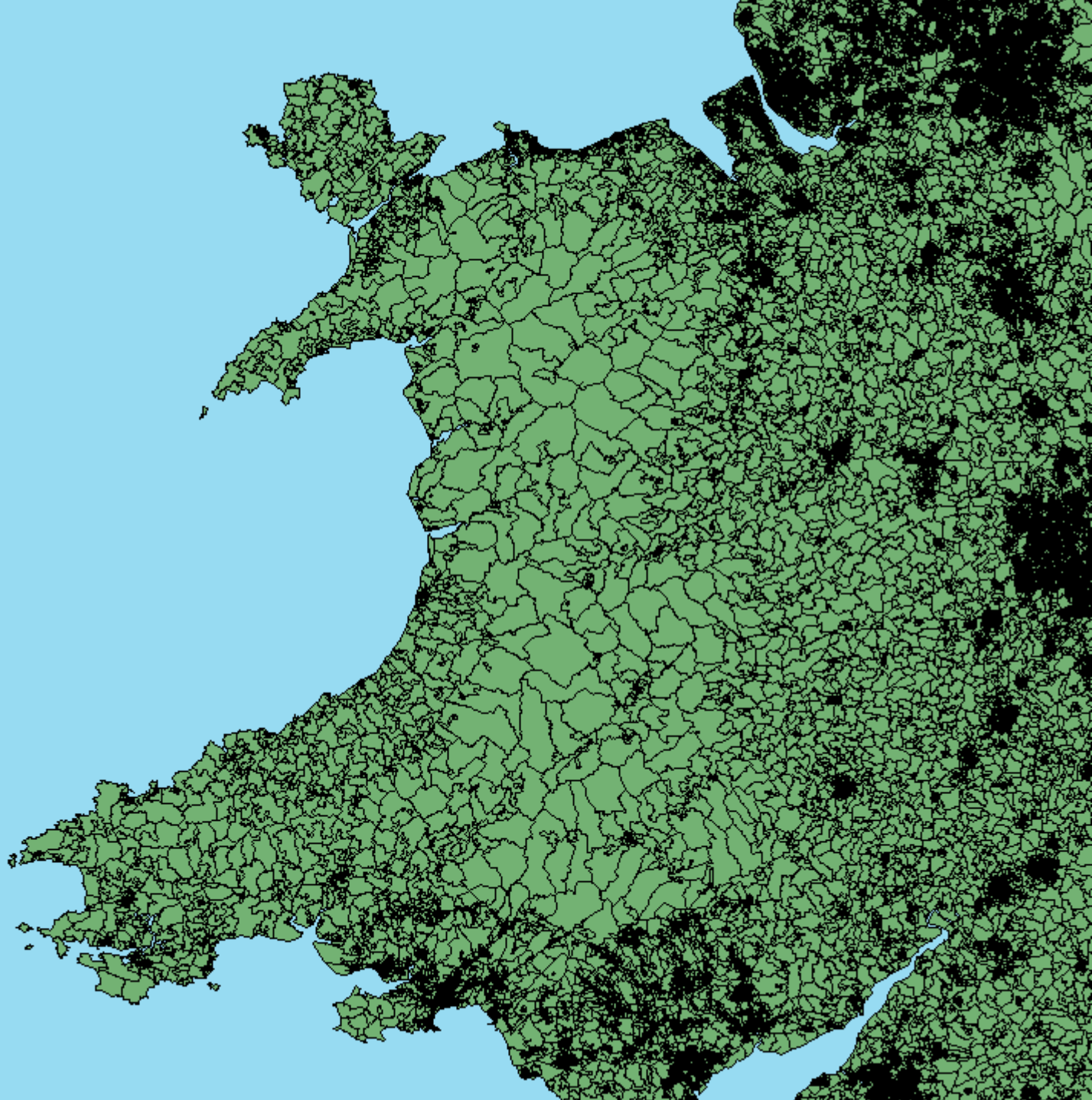
- urban areas





Isolate areas of no population

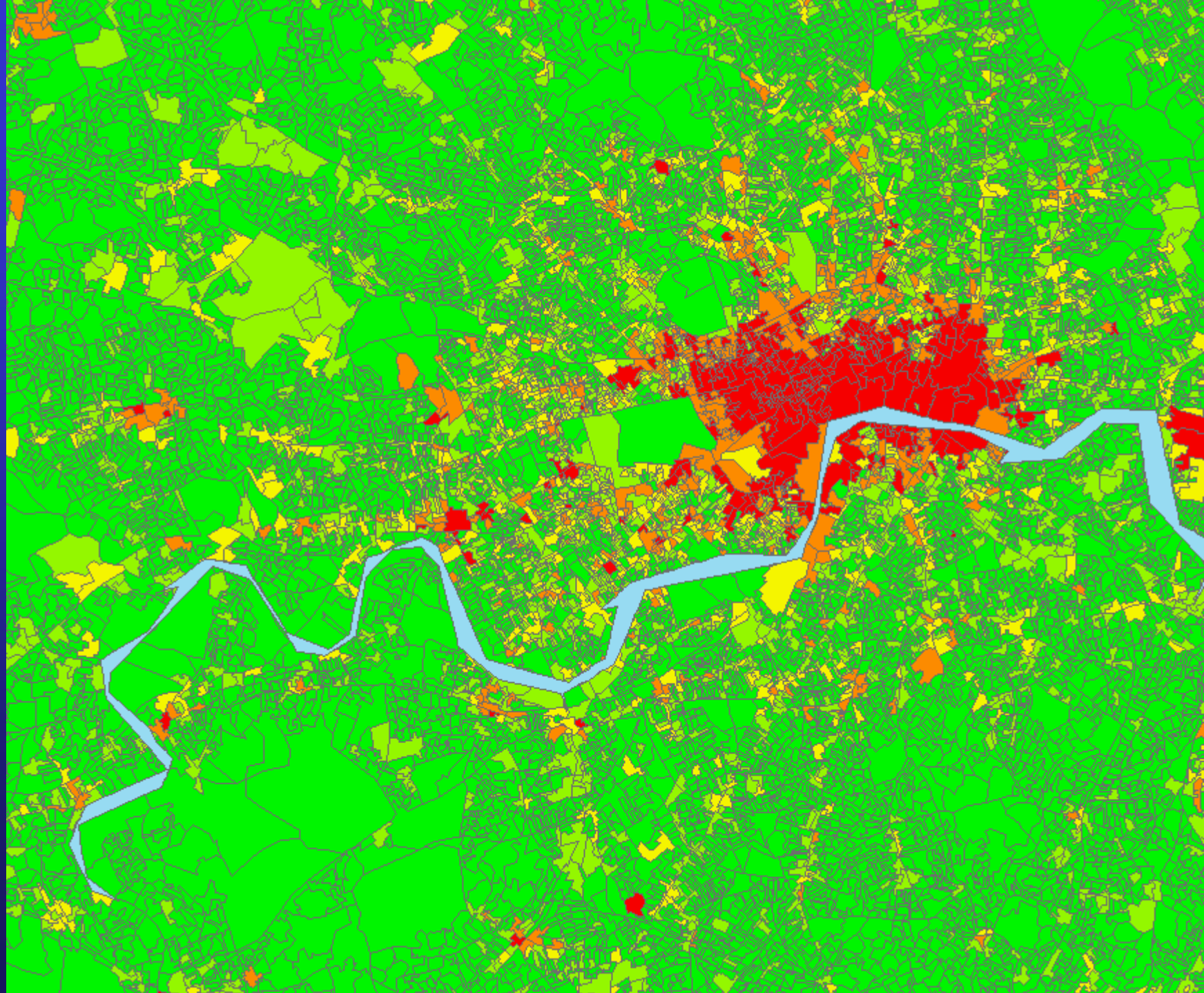
- rural areas





Split OAs into business districts
- where appropriate





Isolate areas of water



1. The drainage basin is the area of land from which all the water that falls in the form of rain or snow eventually flows into a single point, such as a river mouth or the sea.

2. The drainage basin boundary is the line that separates one drainage basin from another. It is usually a ridge or a high point of land.

3. The catchment area is the area of land that contributes water to a particular river or stream. It is the area that is bounded by the drainage basin boundary.

4. The river network is the system of rivers and streams that flow within a drainage basin. It is formed by the joining of smaller streams into larger rivers.

5. The river discharge is the volume of water that flows out of a river or stream at a particular point. It is measured in cubic metres per second (m³/s).

6. The river flow is the movement of water through a river or stream. It is influenced by factors such as the slope of the land, the amount of rainfall, and the characteristics of the river bed and banks.

7. The river velocity is the speed at which water flows through a river or stream. It is measured in metres per second (m/s).

8. The river discharge is the volume of water that flows out of a river or stream at a particular point. It is measured in cubic metres per second (m³/s).

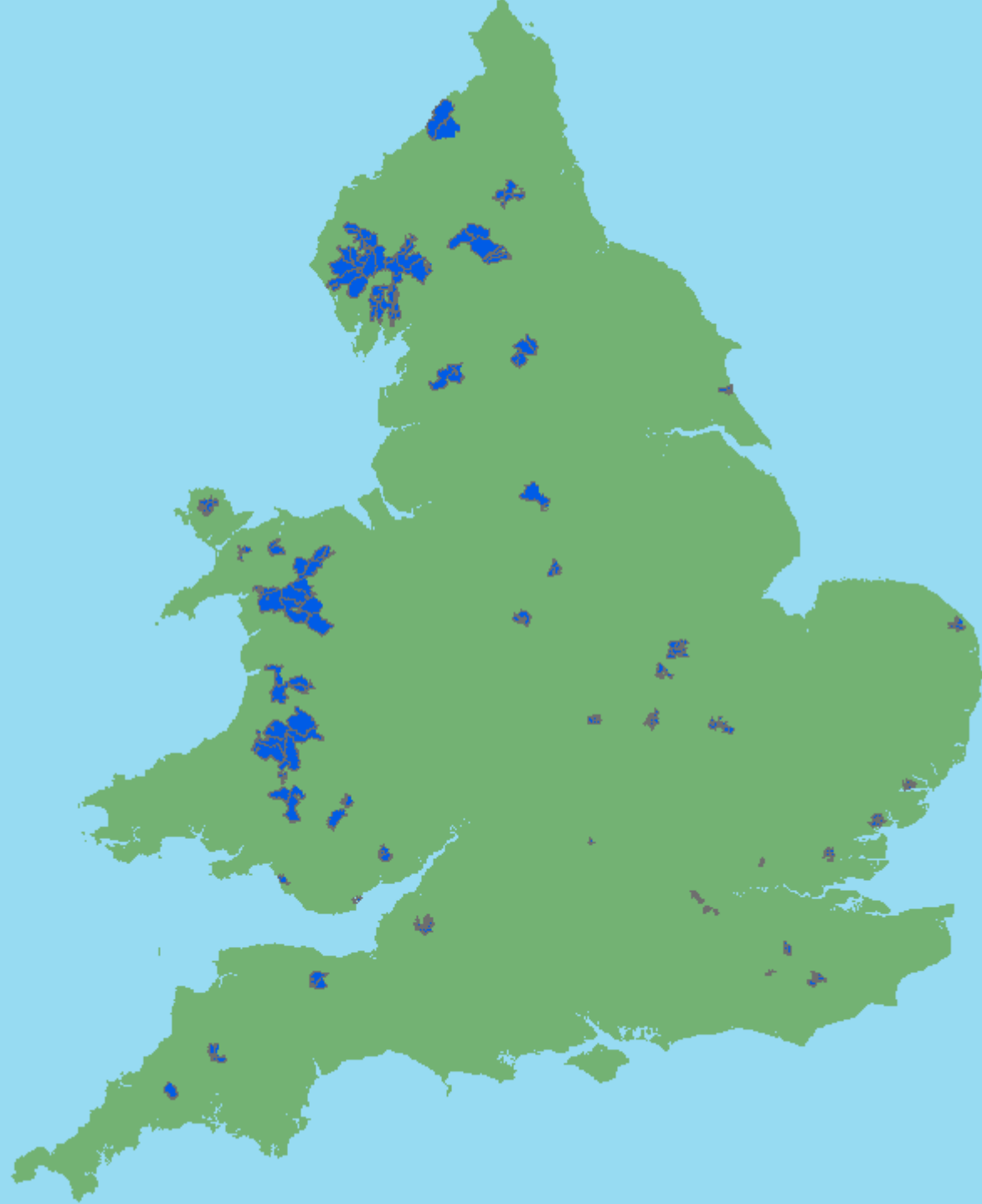
9. The river flow is the movement of water through a river or stream. It is influenced by factors such as the slope of the land, the amount of rainfall, and the characteristics of the river bed and banks.

10. The river velocity is the speed at which water flows through a river or stream. It is measured in metres per second (m/s).

England and Wales

oacode	hectares	final_ar	c	var
00AKGQ0012	123.08000	122.92543	1.00	
00AKGX0002	105.51000	46.72955	1.00	
00AKGX0005	95.57000	50.01438	1.00	
00AKGY0028	94.83000	62.43901	1.00	
00AKHA0023	173.42000	173.39445	1.00	
00FBNW0005	67.26000	26.00300	1.00	
00FBNW0011	5.77000	5.10674	1.00	
00FBNW0012	36.30000	14.98118	1.00	
00FBNW0013	15.71000	15.43785	1.00	
00FBNW0020	788.25000	733.75769	1.00	
00FBNW0033	1141.45000	1141.28758	1.00	
00FPMU0002	1607.54000	1573.65369	1.00	
00FPMU0003	1962.02000	1795.98851	1.00	
00FPMU0005	1412.47000	805.81693	1.00	
00FPMZ0002	871.59000	799.81322	1.00	
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00HANW0003	775.12000	711.77129	1.00	
00HANW0004	391.75000	159.18219	1.00	
00HANW0008	377.34000	352.25794	1.00	
00HAPJ0008	814.63000	776.11418	1.00	

213 OAs



Designate islands OAs

X001_OACOD	IIIHABI	NAME
60RA000063	085	Mainland of Orkney
60RA000061	085	Mainland of Orkney
60RA000060	085	Mainland of Orkney
60RA000140	110	Rousay
60RA000141	110	Rousay
60RA000148	085	Mainland of Orkney
60RA000038	085	Mainland of Orkney
60RA000037	085	Mainland of Orkney
60RA000146	085	Mainland of Orkney
60RA000147	085	Mainland of Orkney
60RA000149	085	Mainland of Orkney
60RA000153	085	Mainland of Orkney
60RA000151	085	Mainland of Orkney
60RA000152	085	Mainland of Orkney
60RA000026	124	South Ronaldsay
60RA000025	124	South Ronaldsay
60RA000034	085	Mainland of Orkney
60RA000035	085	Mainland of Orkney
60RA000036	085	Mainland of Orkney
60RA000033	085	Mainland of Orkney
60RA000028	124	South Ronaldsay
60RA000031	018	Burray
60RA000032	018	Burray
60RA000027	124	South Ronaldsay
60RA000030	124	South Ronaldsay
60RA000029	124	South Ronaldsay
60RD000100	086	Mainland of Shetland
60RD000092	086	Mainland of Shetland
60RD000099	086	Mainland of Shetland
60RD000172	086	Mainland of Shetland
60RD000098	086	Mainland of Shetland
60RD000096	086	Mainland of Shetland
60RD000091	086	Mainland of Shetland
60RD000093	086	Mainland of Shetland
60RD000094	086	Mainland of Shetland
60RD000095	086	Mainland of Shetland
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60RD000103	086	Mainland of Shetland
60RD000102	086	Mainland of Shetland
60RD000108	086	Mainland of Shetland

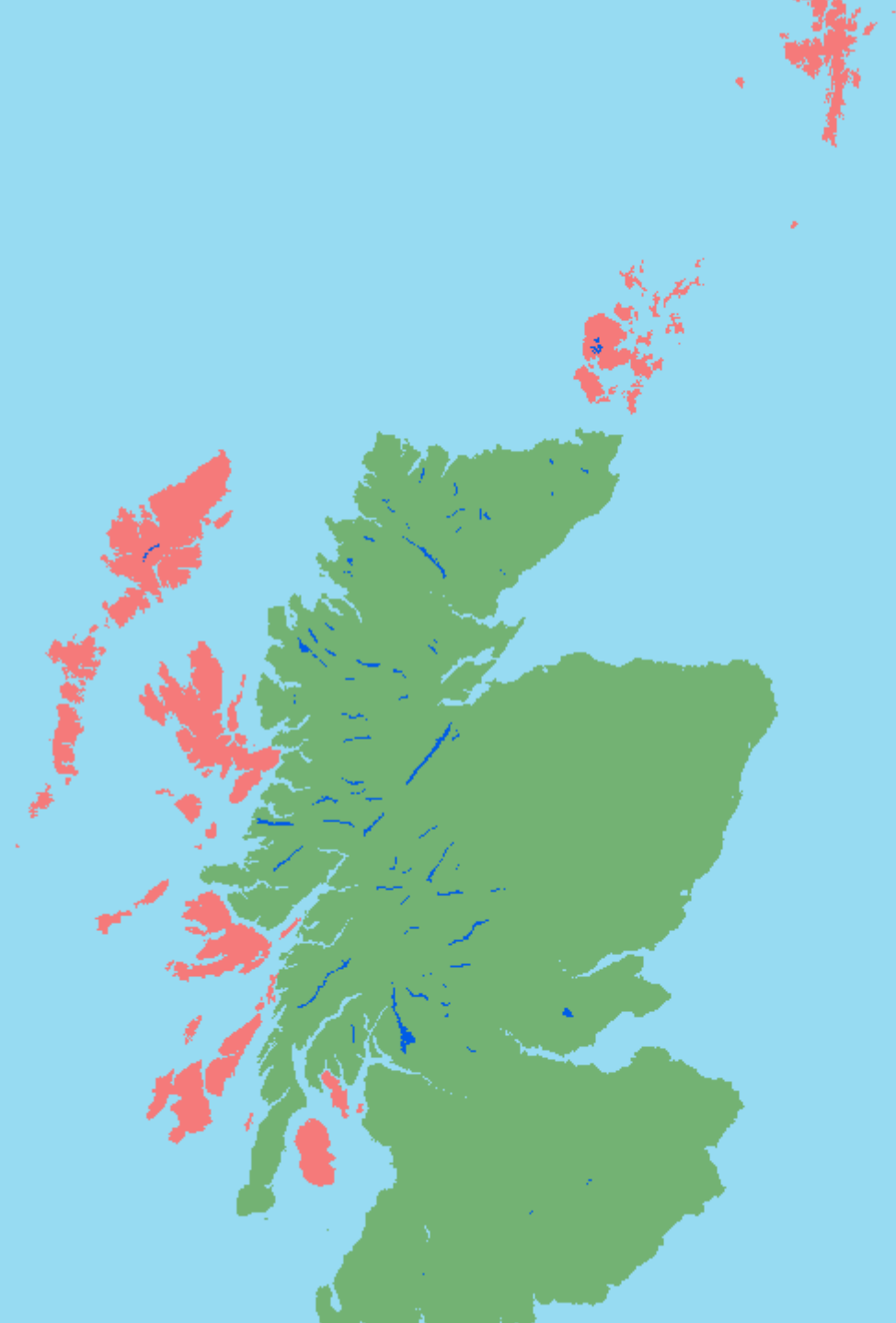


Figure 1. The Pacific Northwest region, showing a network of roads and rivers. The roads are color-coded by length: red for roads under 100 miles, orange for 100-200 miles, yellow for 200-300 miles, and blue for 300-400 miles. The rivers are shown in light blue. The map covers the coastal and inland areas of Washington, Oregon, and California, with major cities like Seattle, Portland, and San Francisco marked.

Coastal and estuary OAs coded and named







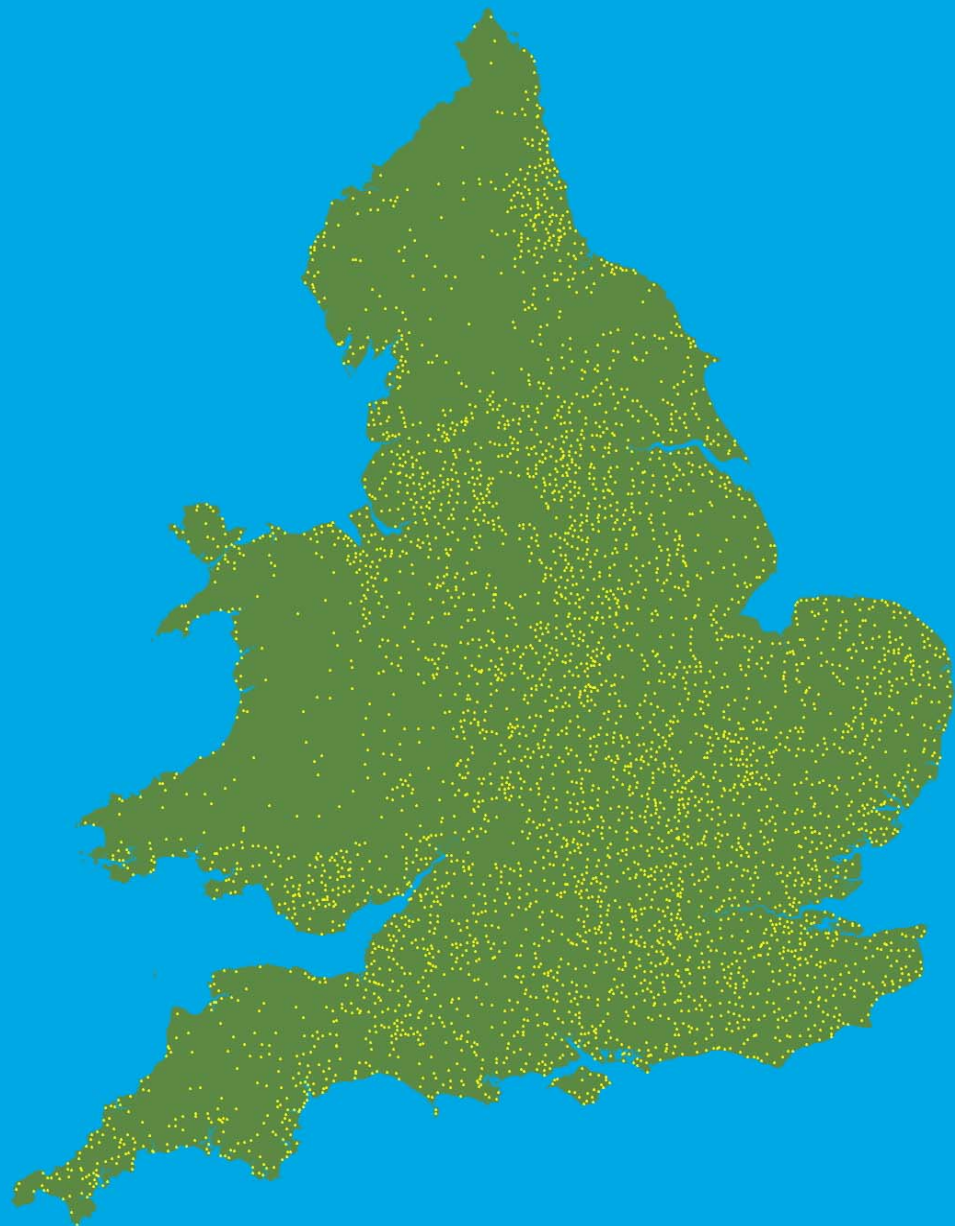
Code country border OAs

No examples, but

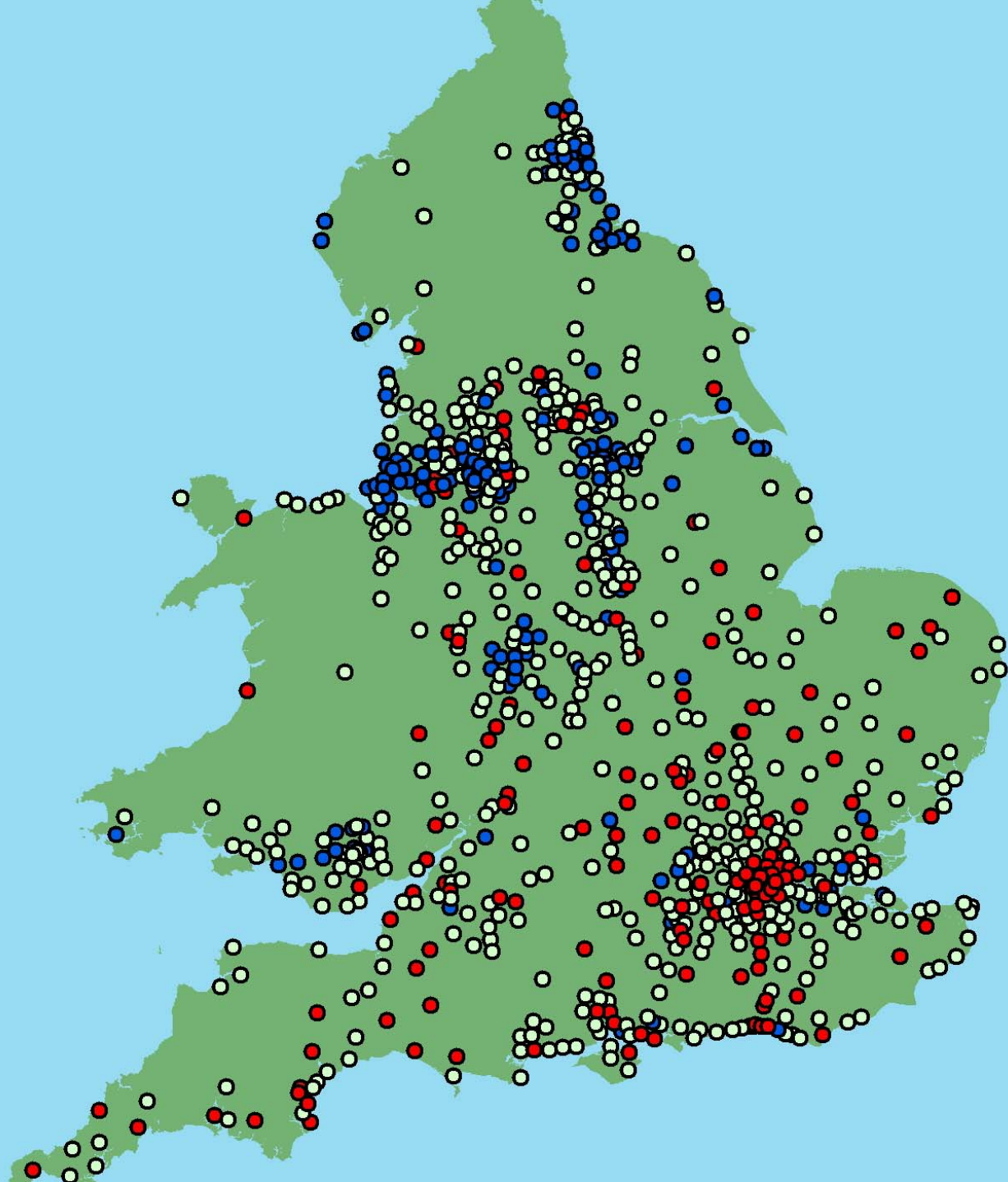
- England and Wales
- England and Scotland
- Perhaps even LA boundaries

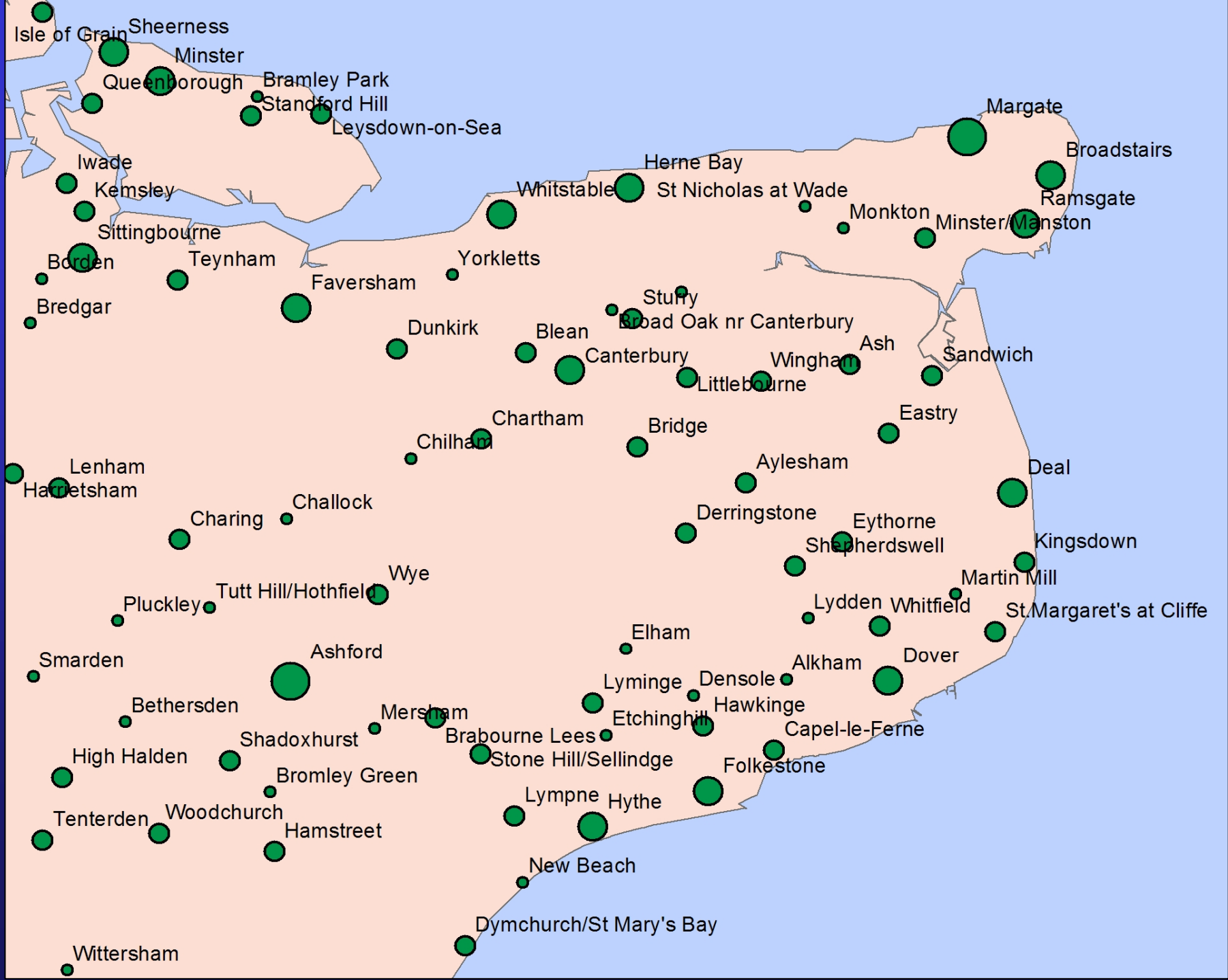
Urban areas coded and named

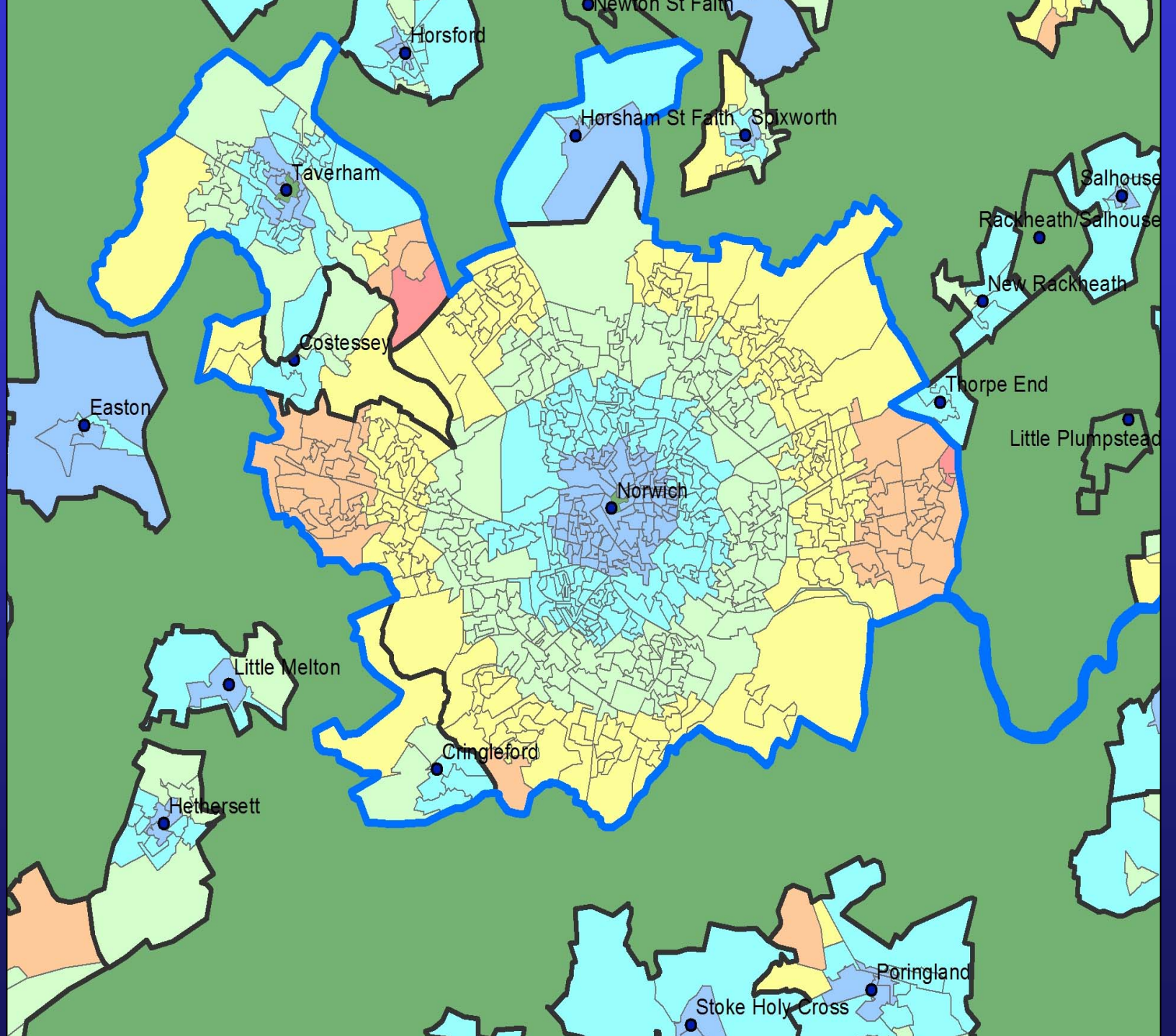
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2	00BNFK0022	*	*	*	*	6	3	*	7	7	*	*	**	**	**	.6	D90235	*	Manchester	394175
3	00CNFS0007	*	*	*	*	3	3	*	7	7	*	*	**	**	**	.2	G90708	*	Birmingham	971036
4	00AAFZ0001	*	*	*	*	4	3	*	7	7	*	*	**	**	**	.1	K60227	*	City of London	7185
5	60QS003964	*	*	*	*	2	3	*	7	7	*	*	**	**	**	.1	133019	*	Glasgow	629501
6	00DAFH0046	*	*	*	*	2	3	*	7	7	*	*	**	**	**	.2	D41306	*	Leeds	443226
7	00AAGB0001	*	*	*	*	4	3	*	7	7	*	*	**	**	**	.8	K60227	*	City of London	7185
8	00AAFT0001	*	*	*	*	7	3	*	7	7	*	*	**	**	**	.1	K60227	*	City of London	7185
9	00PTNK0001	*	*	*	*	1	3	*	7	7	*	*	**	**	**	.4	K12202	*	Cardiff	292233
10	00ASGP0015	*	*	*	*	1	3	*	7	7	*	*	**	**	**	.1	K60213	*	Hillingdon	242833
11	00BKGQ0005	*	*	*	*	7	3	*	7	7	*	*	**	**	**	.1	K60226	*	Westminster	181851
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20	00AAFT0002	*	*	*	*	7	2	*	7	7	*	*	**	**	**	.6	K60227	*	City of London	7185
21	00CNFW0017	*	*	*	*	*	2	*	7	7	*	*	**	**	**	.3	G90708	*	Birmingham	971036
22	00CJFZ0019	*	*	*	*	4	3	*	7	7	*	*	**	**	**	.5	B81104	*	Newcastle upon Tyne	189924
23	00CGFX0017	*	*	*	*	6	3	*	7	7	*	*	**	**	**	.1	E17003	*	Sheffield	439961



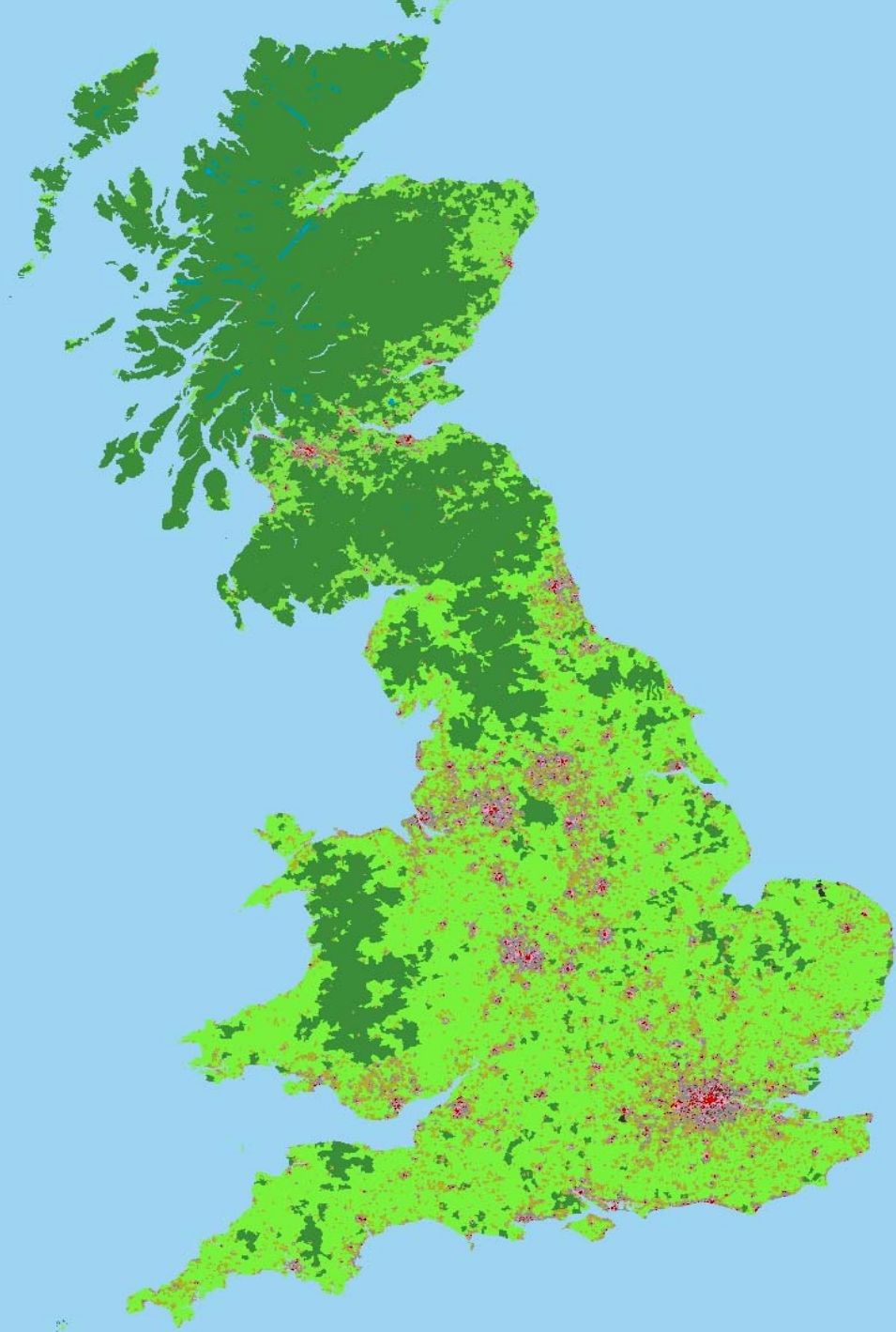


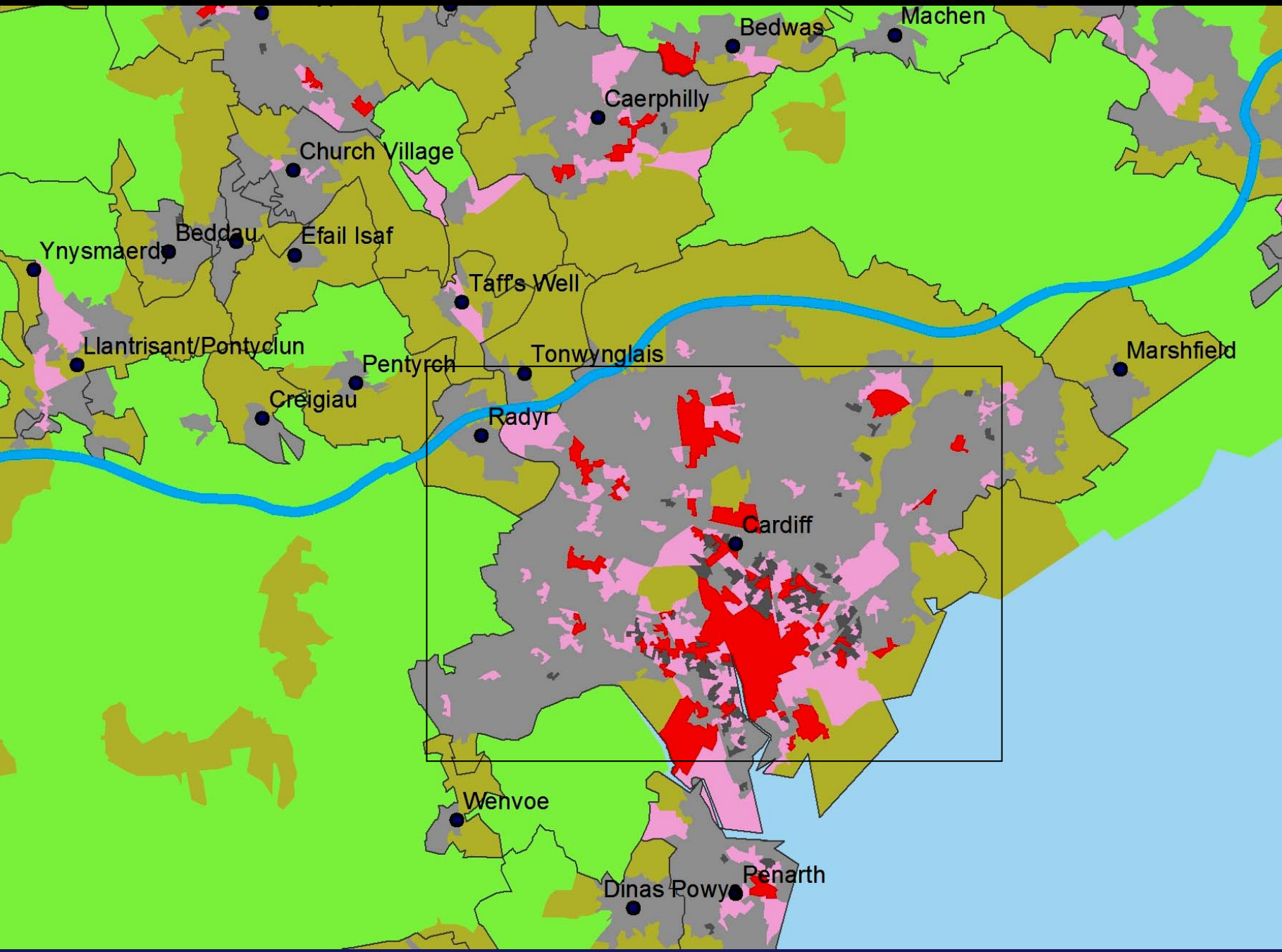






Urban areas used with population and
workplace density maps





Super Output Areas should stay the same for better population tracking over time

Output areas should remain the same where possible - changes should be mergers or splits

This implies keeping the household target at 125

A look-up table should show the relationship between the 2011 and the 2001 OAs structures and OA to postcode, of course.

High water mark used as the boundary of the UK

Country files should be UK contiguous

Areas of water should be isolated and named

Areas of empty of population should be isolated

Islands should be coded and named

Coastal OAs should be coded

OAs on country boundaries should be coded

Urban areas should be coded and named and the file enhanced

The End

