What do British newspapers mean when they talk about droughts?
Examining 25 years of discourse, 1990-2014

Carmen Dayrell
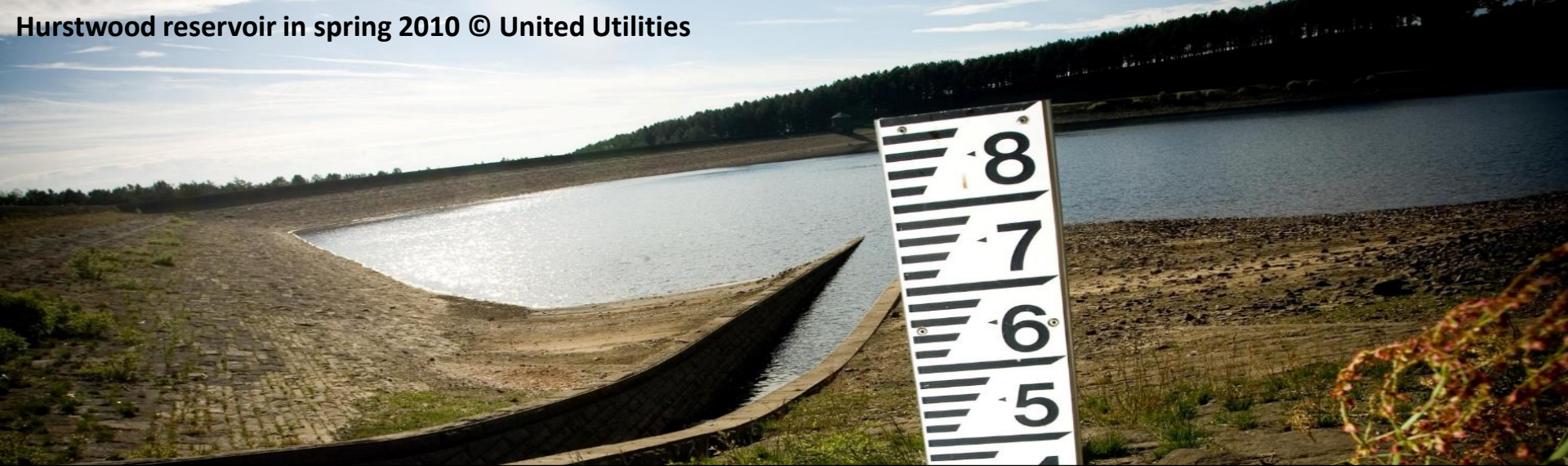
@carmendayrell

Overview

- Research context

- Purpose of this paper

- Corpus compilation

- Methodology

- Preliminary results and conclusions

Major drought events in Britain
(*Marsh et al. 2007)*

- **2010 - 12**
- **2004 – 6**
- **1995-97**
- **1990-92**
- **1975-76**
- **1959**
- **1933-34**
- **1921**
- **1890-1909**
- **1887-88**
- **1854-60**
- **1798-1808**

1976

1890s

Historic Droughts and Water Scarcity

A systems-based study of drivers, impacts and their interactions

Why newspapers?

Purpose of this paper

To examine British media discourses surrounding **drought** and water scarcity events that took place in **Britain** between **1990 and 2014**

Corpus Compilation: Gabrielatos (2007)

Time period: 1990-2014

Broadsheet papers

The Times
The Daily Telegraph
The Independent
The Guardian/Observer
The Herald
The Scotsman

The Daily Mail
The Daily Mirror
The Sun
The Daily Star
The Daily Record
The Express

Tabloids

Text Collection: Gabrielatos (2007)

Query terms:

- drought(s)
- water scarcity
- water shortage(s)

Keyword	Keyness
drought	6858.466
climate	4699.348
water	3045.096
global	2559.473
emissions	2004.619
warming	1927.380
goal	1795.822
lund	1632.313
year	1429.734
droughts	1363.061
wheat	1347.040
prices	1085.408
floods	1046.011
bali	1022.613
rooney	999.919

CASS
Corpus Approaches
to Social Science

Text Collection: Gabrielatos (2007)

Query terms:
- drought(s)
- water scarcity
- water shortage(s)
- water CUT off
- water rationing
- hosepipe ban(s)

40,315 texts

Keyword	Keyness
drought	6858.466
climate	4699.348
water	3045.096
global	2559.473
emissions	2004.619
warming	1927.380
goal	1795.822
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bali	1022.613
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What does *drought* mean?
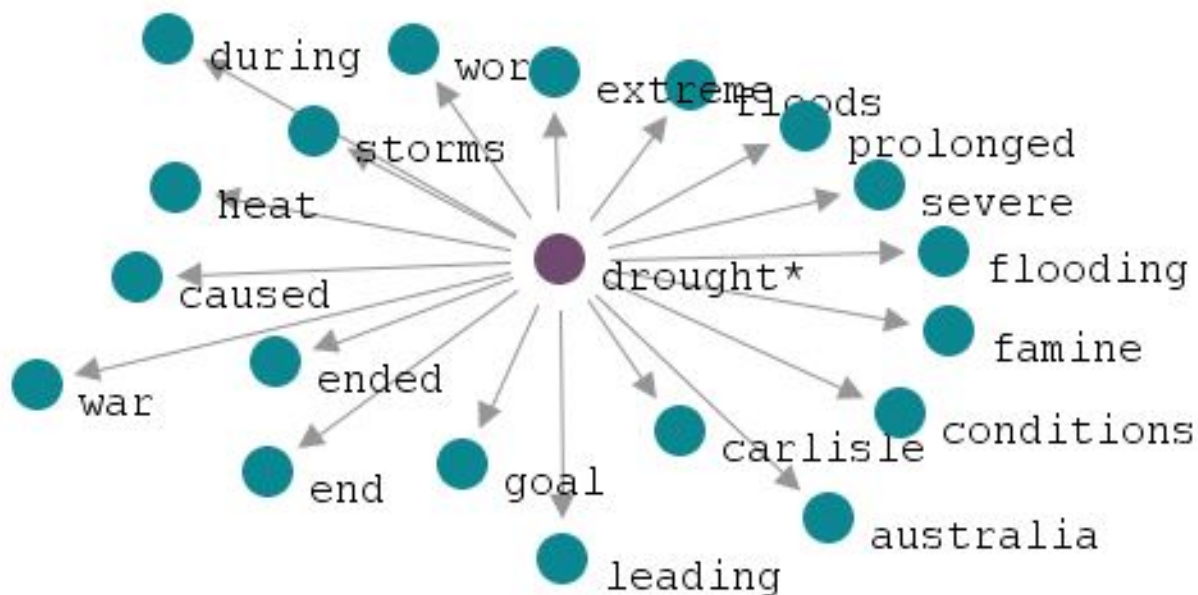
What does *drought* mean?

KWIC: drought* > goal

	Search Term	Occurrences 97/1,024	Texts 5/6 ▼	Context 7 ▼	Corpus Corpus 1

| Index	File	Left	Node	Right
122	Dec-2007.TX'7	LANGUAGE: ENGLISH GRAPHIC:	DROUGHT'S	OVER: Bobby back on goal trail PUI
182	Jul-2013.TXT ;	LEAGUE; DOESN'T FEAR A GOAL	DROUGHT	Barca hero Tony back Bhoys to hit
200	Jul-2013.TXT	ew would break teams. Their goal	drought	has also diluted that powerful and
201	Jul-2013.TXT	HIC: Scarce supply: Kilkenny's goal	drought	is partly down to Henry Shefflin be
313	Jul-2013.TXT	GHAM is desperate to end his goal	drought	but he will take a clean sheet
423	Nov-2000.TX'g	Leeds but denies his recent goal	drought	was down to the transfer talk. Eng
431	Nov-2000.TX'vin	Phillips ended his six-game goal	drought	with an extra-time penalty winner.
432	Nov-2000.TX'.-1)	KEVIN PHILLIPS broke his goal	drought	to earn Sunderland a dramatic extr
443	Nov-2000.TX'd	smiling. If his two-month goal	drought	was getting him down, his team-m
468	Nov-2000.TX'nselves	because of a first half goal	drought	The Bully Wee had to come
469	Nov-2000.TX'	blast his way out of a goal	drought	and pile on the misery for Dundee
470	Nov-2000.TX'hillips	currently experiencing a goal	drought	he has not scored from open play
477	Nov-2000.TX'o	Galway United's mid-season goal	drought	even though he has yet to score.

What does *drought* mean?

Legend: Sports · Finance · Lack/Shortage of water · Other meanings

goal drought
six-game drought
winner drought
trophy drought
title drought
scoring drought
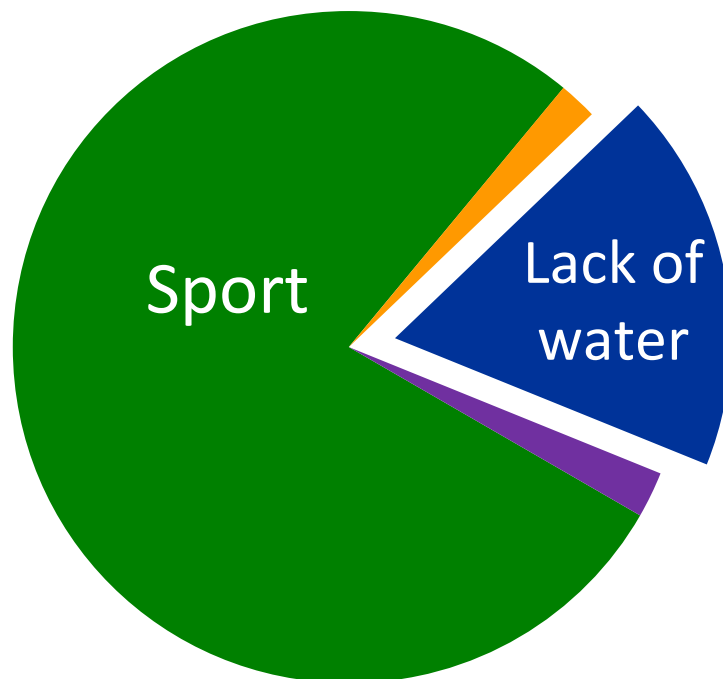
Sport

Lack of water

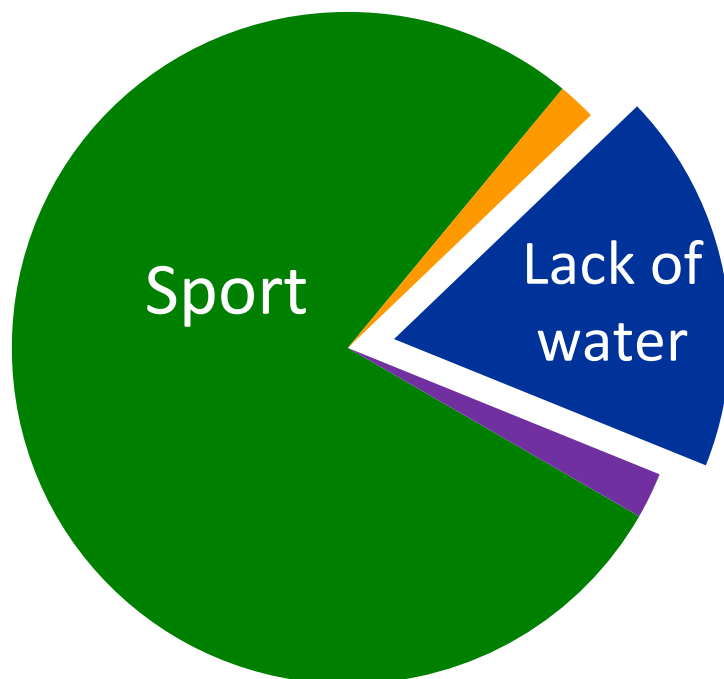http://**cass.lancs.ac.uk**

What does *drought* mean?
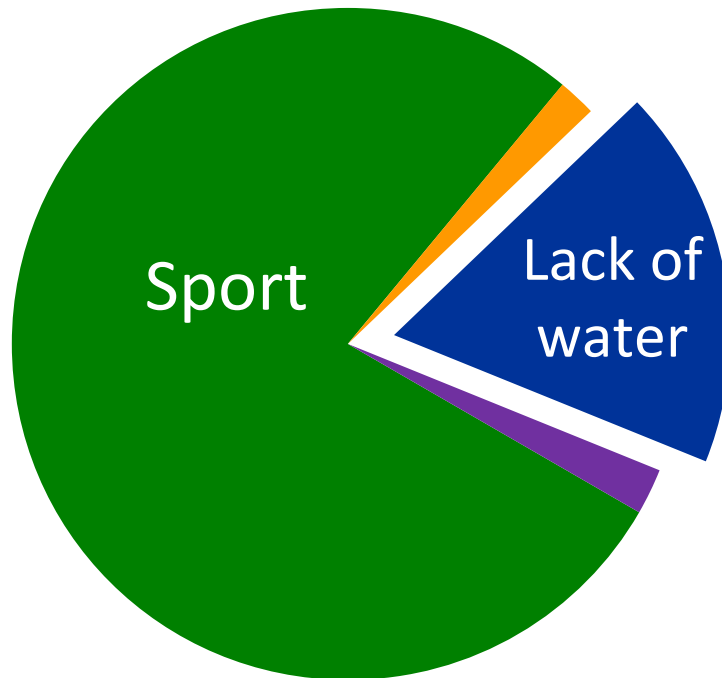
credit drought
loan drought
mortgage drought
sales drought
cash drought

Legend: ■ Sports ■ Finance ■ Lack/Shortage of water ■ Other meanings

Pie chart labels: Sport, Lack of water

http://**cass.lancs.ac.uk**

What does *drought* mean?

Legend:
- Sports (green)
- Finance (orange)
- Lack/Shortage of water (blue)
- Other meanings (purple)

Sport

Lack of water

drug drought
lager drought
news drought
wine drought
sex drought
man drought
love drought

http://**cass.lancs.ac.uk**

What does *drought* mean?

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Corpus Approaches
to Social Science

Legend: ■ Sports ■ Finance ■ Lack/Shortage of water ■ Other meanings

Pie chart labels: Sport, Lack of water
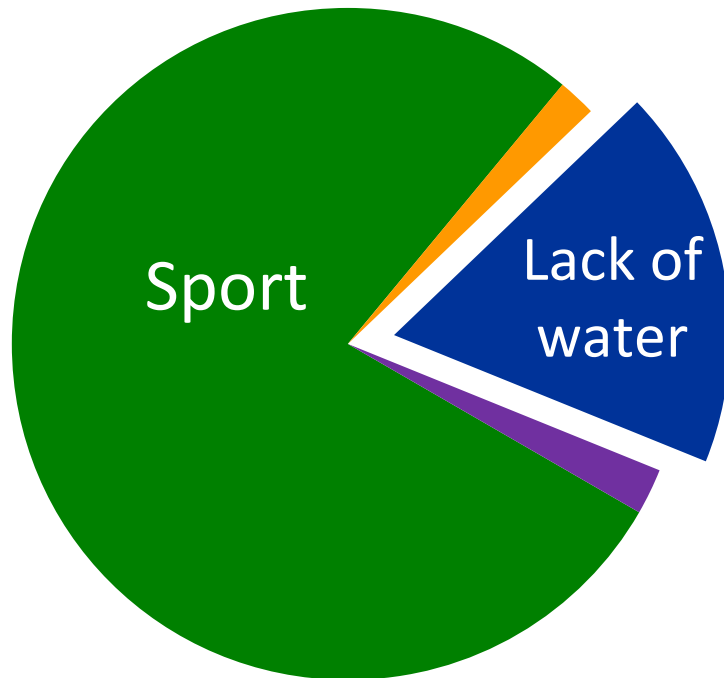
Broadsheet papers
4,986 texts
3.8 million words

Tabloids
2,384 texts
1.1 million words

http://**cass.lancs.ac.uk**

Where did the drought happen?

Where did the drought happen?

Geographic Information System (GIS)

- Identify named geographical entities across very large bodies of textual material

(Gregory and Ell, 2007; Gregory *et al.,* 2015; Murrieta-Flores *et al.,* 2015; Donaldson *et al., in press*)

Geoparsing

The Sun 28/02/2012

decline in Arctic sea ice . Meanwhile , experts say Britain s endangered species , such as rare birds , face a crisis because the **drought** has dried up important wetlands . BRITAIN is currently so unseasonably warm that temperatures for the average February day are being
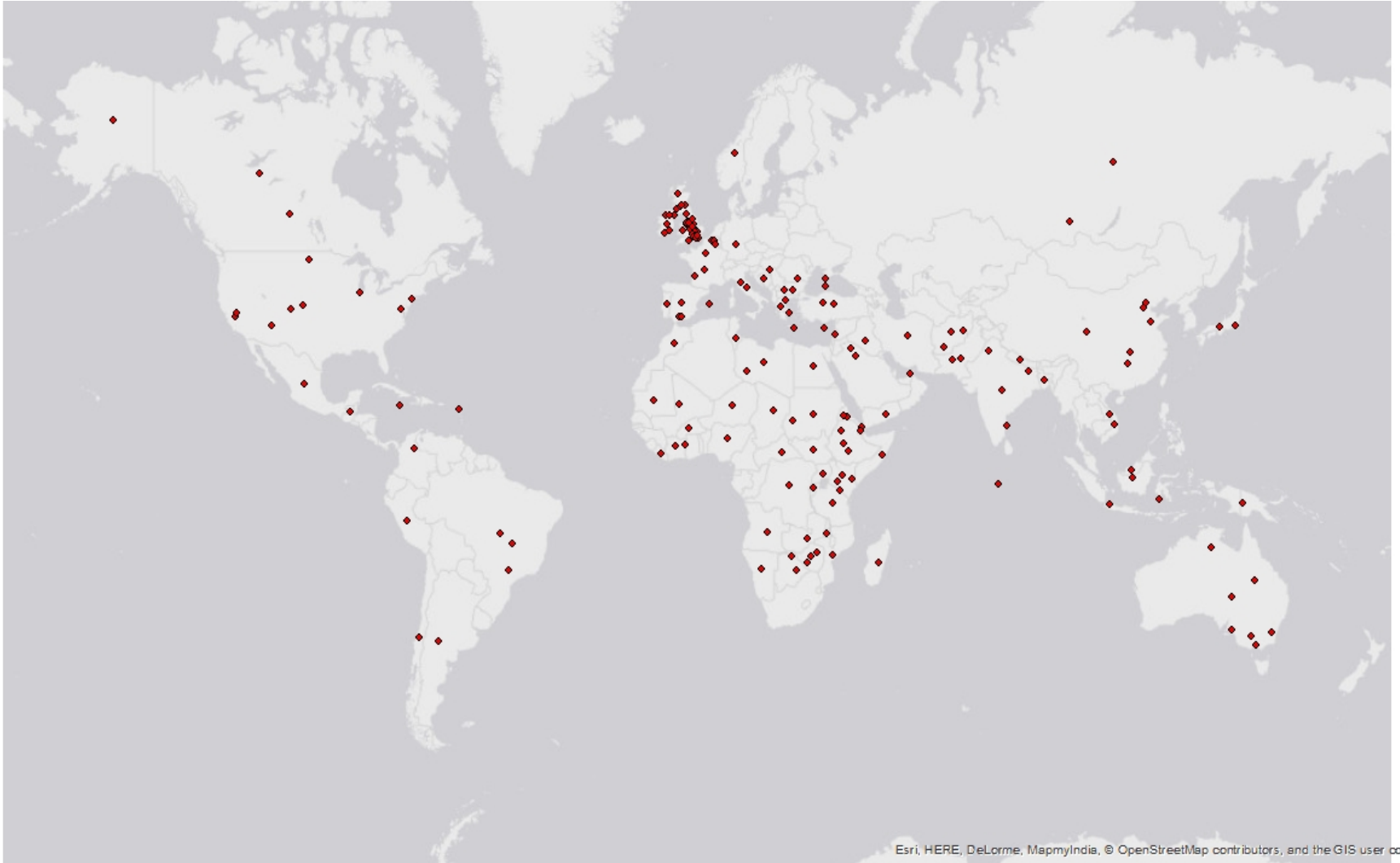
Geoparsing

The Sun 28/02/2012

decline_NN1 in_II Arctic_JJ sea_NN1 ice_NN1 ._YSTP
Meanwhile_RR ,_YCOM experts_NN2 say_VV0 **Britain_NP1**
s_GE endangered_JJ species_NN ,_YCOM such_II21 as_II22
rare_JJ birds_NN2 ,_YCOM face_VV0 a_AT1 crisis_NN1
because_CS the_AT **drought_NN1** has_VHZ dried_VVN
up_RP important_JJ wetlands_NN2 ._YSTP **BRITAIN_NP1**
is_VBZ currently_RR so_RG unseasonably_RR warm_VV0
that_CST temperatures_NN2 for_IF the_AT average_JJ
February_NPM1 day_NNT1 are_VBR being_VBG

Geoparsing

The Sun 28/02/2012

decline in Arctic sea ice . Meanwhile , experts say <enamex sw="w467562" **long="-2.69531" lat="54.75844"** type="country" gazref="geonames:2715" name="United Kingdom of Great Britain and Northern Ireland" conf="1.965072848">Britain</enamex> s endangered species , such as rare birds , face a crisis because the **drought** has dried up important wetlands . <enamex sw="w467682" **long="-2.69531" lat="54.75844"** type="country" gazref="geonames:2715" name="United Kingdom of Great Britain and Northern Ireland" conf="1.965072848"> BRITAIN</enamex> is currently so unseasonably warm that temperatures for the average February day are being

Where droughts happened?

Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community
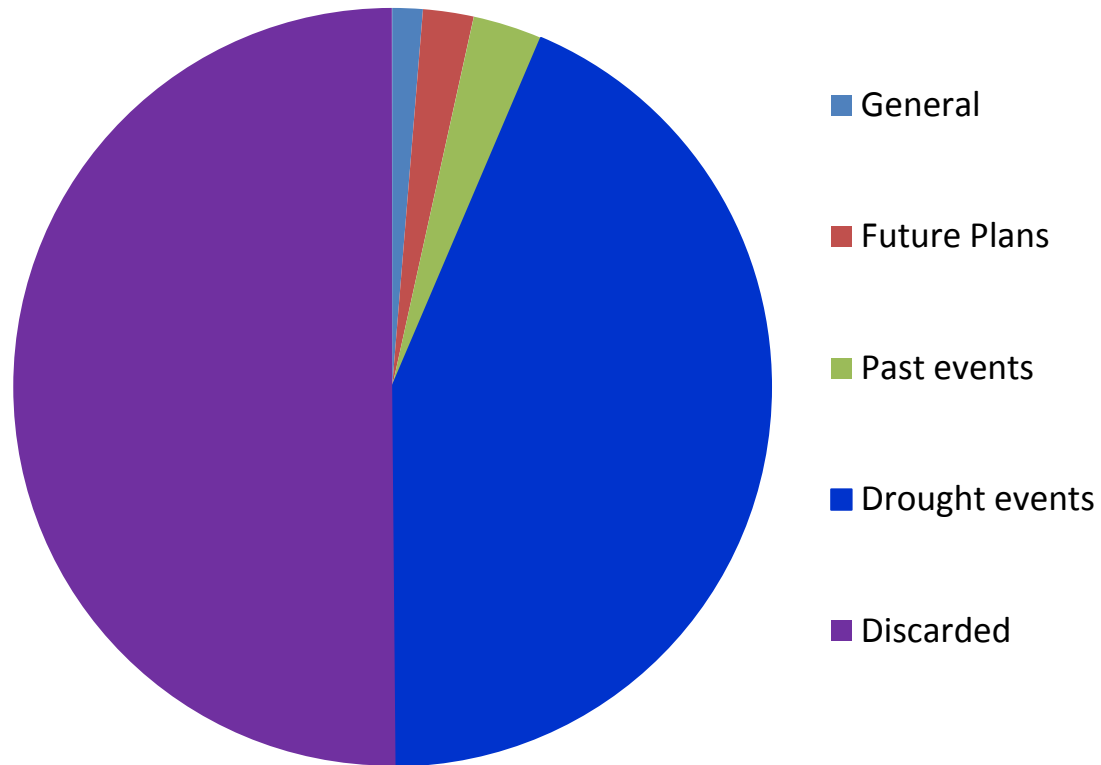
Geoparsing

The Herald 24/04/2008

contribution in the case of **East Timor**, it has responded separately in other emergencies - giving 43m to the Horn of **Africa** **drought** against 7.15m from the CERF. The **UK** contribution to the CERF adds around ten per cent to the 400m that we
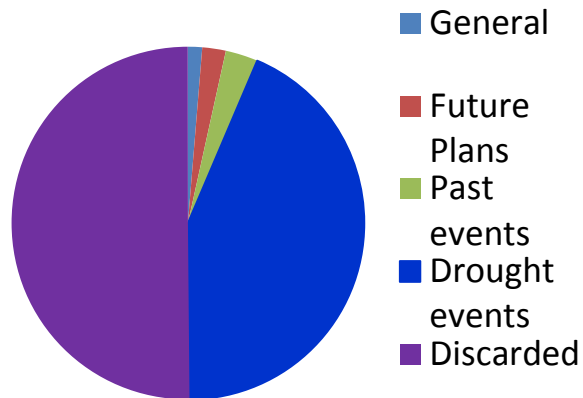
Geoparsing

The Express 30/03/2000

She warned that scientists predicted a rise in the Earth 's temperature of up to 3.5C within 100 years , with more **drought** in Southern **England** coupled with rising sea levels which would expose vast areas of the country to flooding. She

Droughts Britain

Legend:
- General
- Future Plans
- Past events
- Drought events
- Discarded

http://**cass.lancs.ac.uk**

Droughts Britain

- General
- Future Plans
- Past events
- Drought events
- Discarded

The Observer 29/12/2002

It absolutely follows as night follows day that if some people are so poor that they live off what nature gives , then we will have disasters . If you have a **drought in the UK** or floods , no one is going to go hungry because we have so many other resources .
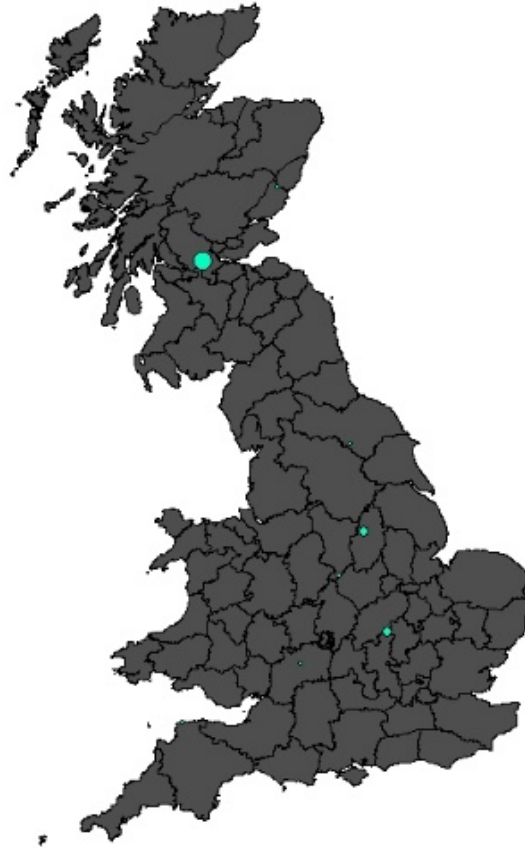
Tabloids

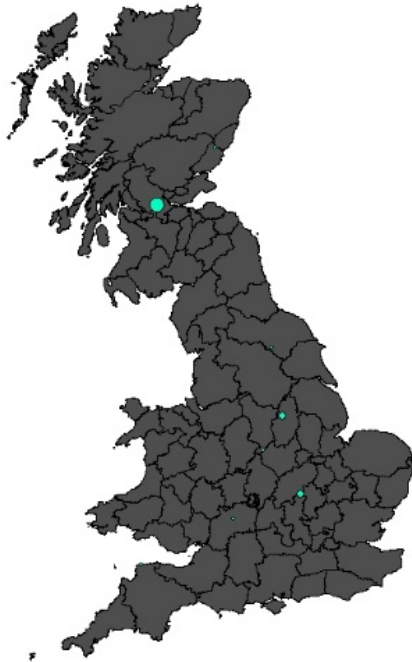## Placenames related to drought events

http://**cass.lancs.ac.uk**
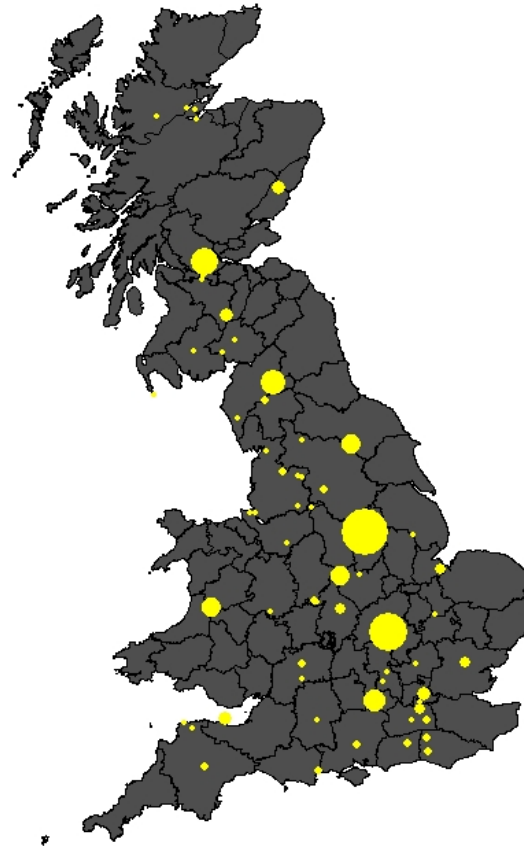
Tabloids

Places with NO drought

Tabloids

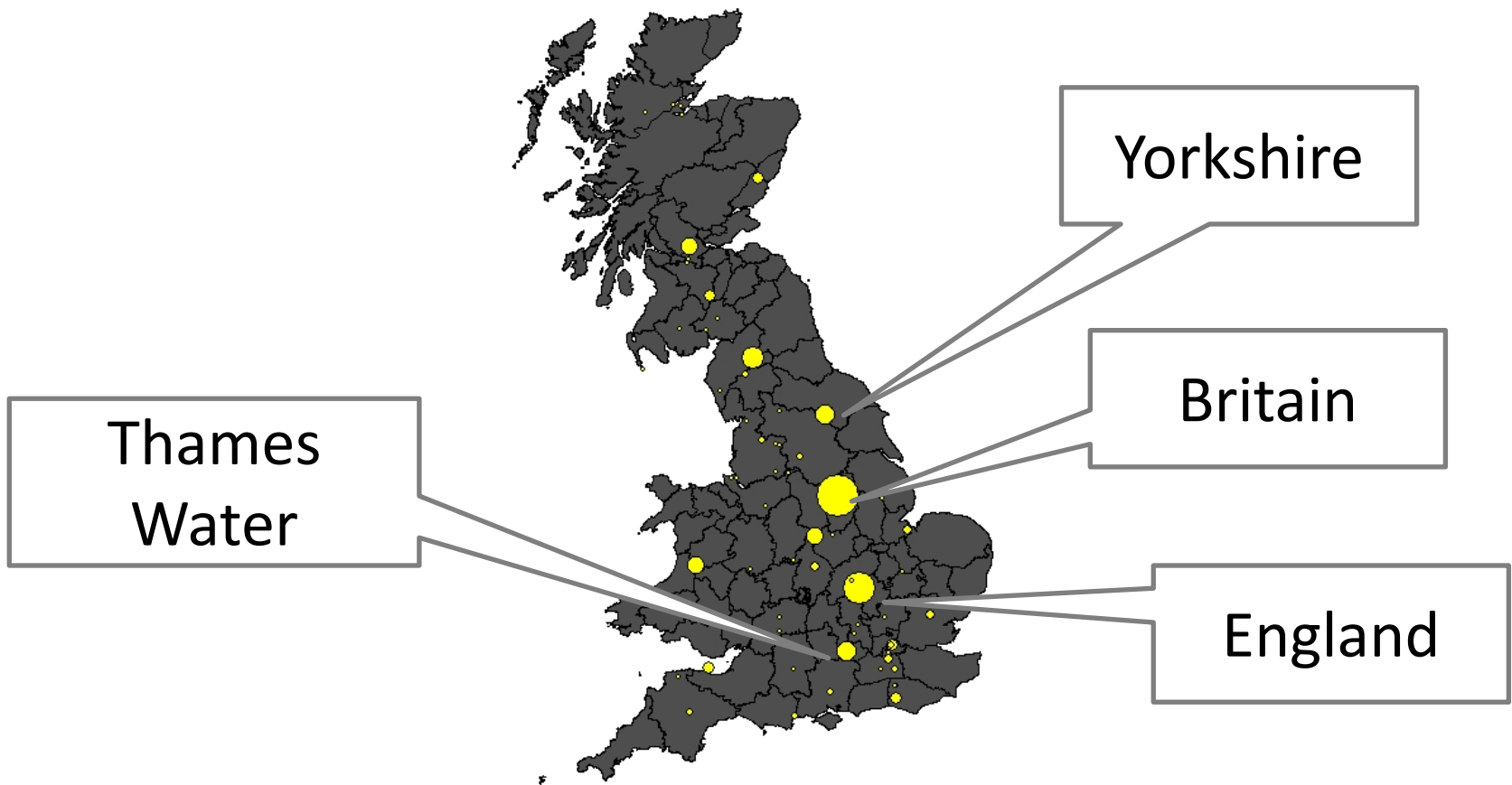## Scotland is rich in water resources

The Times 31/12/2011

The year was also one of the driest on record in **England**, with a **drought** order in the South East this month . However , **Scotland** had its wettest year ever .

Tabloids

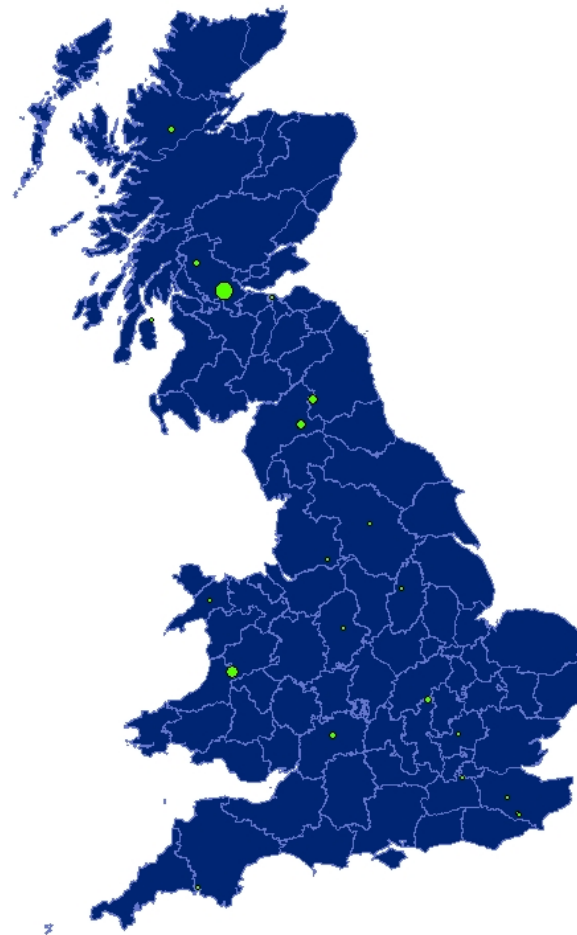Drought events tend to happen in England

Tabloids

Drivers Responses Impact (DRI)

- Drivers
  - Low rainfall
    - Poor management and high profits
- Responses
  - (hosepipe) bans or restrictions
  - Drought orders or permits
- Impacts
  - Low water levels
  - Plants/gardens are affected

Broadsheet

Places with NO drought

http://**cass.lancs.ac.uk**

Broadsheet

Drought events tend to happen in England

Yorkshire

Britain

Thames Water

England

Broadsheet
Drivers Responses Impact (DRI)

- Drivers
  - Low rainfall
    - Poor management and high profits

- Responses
  - (hosepipe) bans or restrictions
  - Drought orders or permits

- Impacts
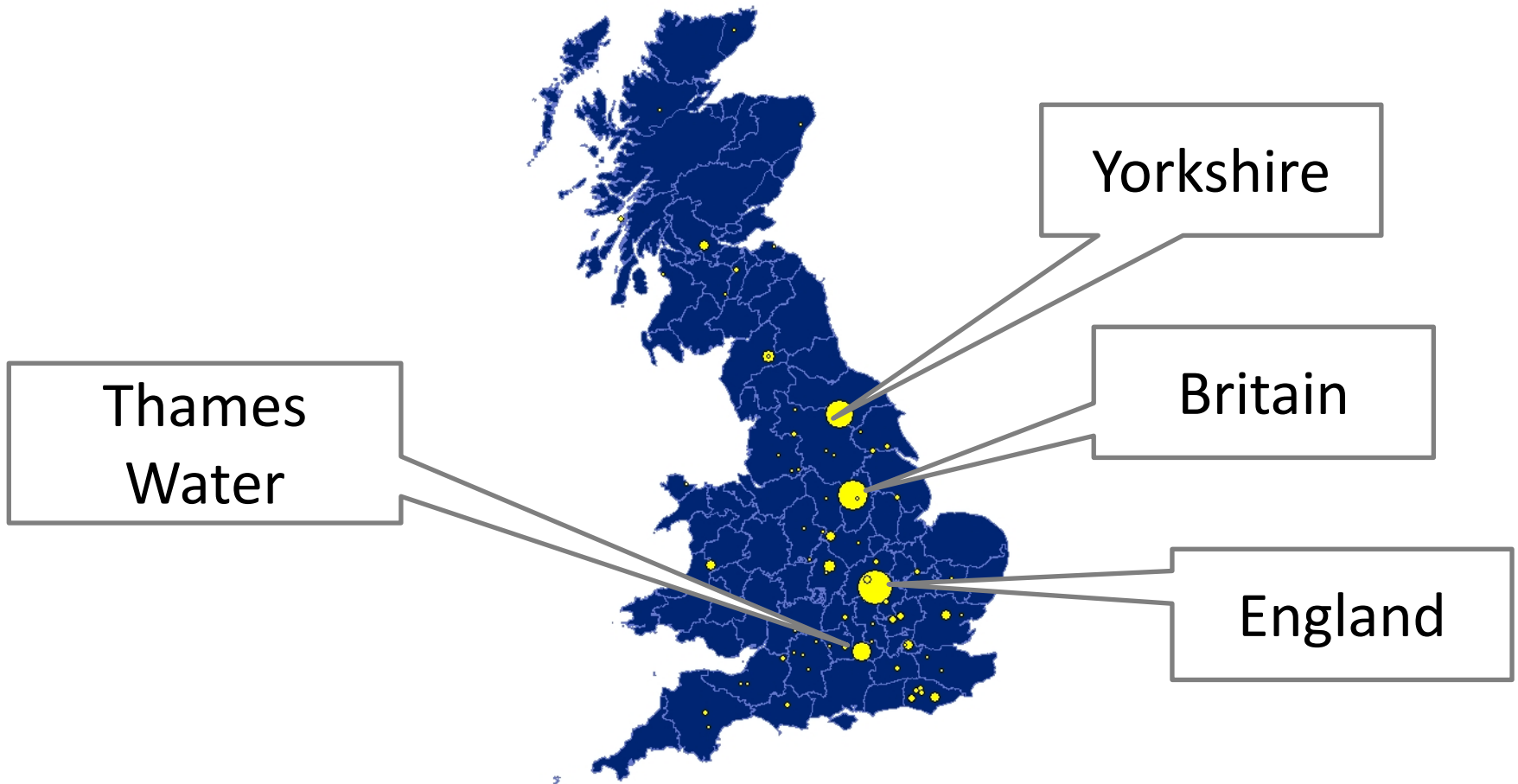 - Low water levels
  - Plants/gardens are affected

Lots to be done …

- Other words – hosepipe ban(s)

- General discussion around drought events in Britain
  - By event

- Discourse around drought events in places other than Britain (non-Britain)

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Q & A

Carmen Dayrell

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