Economic Impact of 2015-16 Floods

Andy Brown, Flood Risk Manager - Cumbria February 2018



Properties flooded in Winter 2015/16 flood events Storms Desmond, Eva & Frank **EWCASTL** Approximate numbers of Northumberlan properties flooded as reported National Park Newc NEWCASTLE to the Environment Agency CARLISLE PORTSMOUTH **Properties Flooded** Storm Desmond Durham 4 - 22 Dec 2016 COCKERMOUTH **Properties Flooded** KESWICK APPLEBY Storm Eva / Frank Middlesbrough National Pol 25 Dec 2015 - 7 Jan 2016 North Yor Moors National KENDAL

LANCASTER

LIVERPOOL

National Park

17,000 homes and **businesses flooded**



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Scunthorpe

Scarborough

HULL

Park

YOR

LEEDS

0

HEBDEN BRIDGE

TODMORDEN MYTHOLMROYD

MANCHESTER

The National View





- Consistent method to 2007 & 2013/14
 - £1.6bill best estimate
 - Range £1.3 to £1.9bill
 - 2007 3.9bill
 - 2013/14 1.3bill

Estimating the economic costs of the 2015 to 2016 winter floods

January 2018



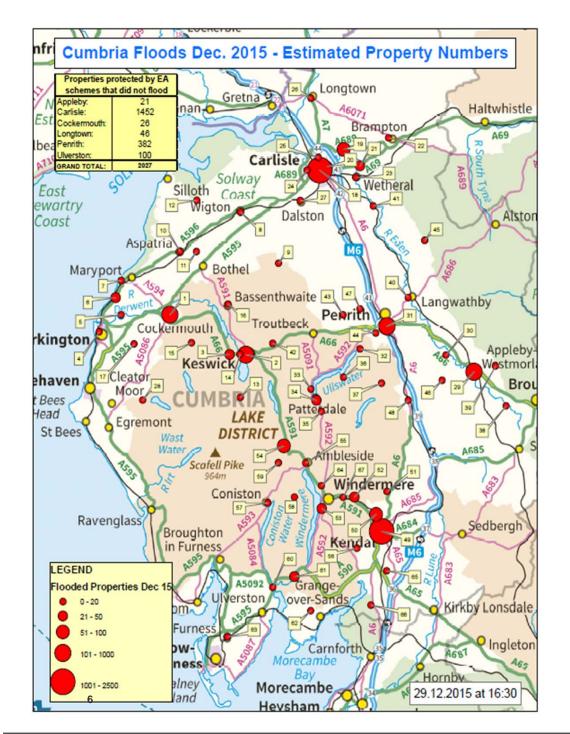
Impact category	Best estimate (£ million)	Low (£ million)	High (£ million)	Uncertainty rating
Residential properties	£350	£308	£392	Medium to low
Businesses	£513	£410	£616	Medium to low
Temporary accommodation	£37	£31	£43	Medium to low
Vehicles, boats, caravans	£36	£31	£41	Medium to low
Local authorities (excluding roads)	£73	£55	£92	Medium to high
Emergency services	£3	£3	£3	Medium to low
Flood management asset and service	£71	£63	£78	Low
Utilities – energy	£83	£75	£91	Low
Utilities – water	£21	£16	£26	Medium to high
Transport – rail	£121	£103	£139	Low
Transport – roads	£220	£165	£275	Medium to high
Agriculture	£7	£6	£8	Medium to low
Health	£43	£32	£54	High
Education	£4	£3	£5	High
Other (wildlife, heritage and tourism)	£19	£13	£25	High
Total	£1.6 billion	£1.3 billion	£1.9 billion	



Loss of life & health impacts

The effects of the floods are personal. Thousands of Cumbrians, like people in other flood-affected parts of the country, have seen their lives upturned. Many have experienced life-changing financial losses and incredible stress. Speaking with flood victims, the words that come out are despair, fear and anxiety - fear of flooding again and the anxiety of an approaching winter. Floods don't just take your home, the place where you should feel safe, they often take your future as well. Cumbrian resident Dr Ed Henderson and a coauthor of the National Hydrological Monitoring Programme review (Marsh et al. 2016)⁷





	Flooded areas	Local Authority	Property Numbers
	emp cm	Allentaile Dorsugh-Council	643
Casul		Alentale Boroust-Council	400
Grath	vats Inglue & Dampot	Alandaia Borough Council Alandaia Borough Council	29
Came		Allentaile Borough Council	1
Finby	(Fimby Gill and Penny Gill)	Allendele Borough Council	50
Marcia		Alexania Borough Council	20
Wigto	n (Station Rd)	Alendale Borsugh Council	20
	w Valley (Caldbeck, Milhouse, Gedberghans & Gzockdalewath)	Allendaile Dorough Council	10
_		Alentale Borouth Council	5
Attay	a fasset	Allandelle Borough Council Allandelle Borough Council	
	edale Valley (nr. Seatuler, Rosthealte, Grance & Lodow)	Alentale Dorouth Council	,
Potin	anala	Alentaie Borsugh Council	4
Lottor	Naley (Suteman, Crumnock, HohiLow Lonon, Southwate Bridge)	Alendele Borough Council	10
Danse	Chaile	Alendele Dorough Council	0
River	Marron (Branthwalts, Bridgefoot, UBock)	Allendelle Dorough Council	0
		ALLERCALE BOROUGH TOTAL	1324
Carla	ie (no Etertor Terrece)	Cardala City Council	1902
_	Insity and Grusby on-Eden	Carleie City Council	80
Ricke	by	Carlaie City Council	40
Warw	ick Bridge	Carlaia City Council	30
Grang	nton (Carlaia)	Cartala City Council	0
Wethe	10	Cardinia City Council	0
	m Deck Carlaie	Cartaia City Council	0
	ng Sylia Carlaia	Carlaie City Council	0
		Carlaia City Council	0
Califi	on Carliele	Carlaie City Council	0
		CARLISLE CITY TOTAL	2112
Crown	dale Bridge	Copeland Borough Council	0
		COPELAND BOROUGH TOTAL	
Applet	7	Edwn District Council	174
Doltor		Eden District Council	2
Carro	nt Bridge and Brougham	Eden District Council	101
Poole	y Bridge and Ullowster	Eden District Council	20
Glenti		Eden District Council	57
Pater	rtain .	Eden District Council Eden District Council	21
	op over side of Liberater	Eden District Council	
_	ar Valley (Bargton & Dampton Grange)	Edus District Council	
	Eden Valley (R3Hby Stephen, Drough, Warcop, Gt Asby)	Eden District Council	20
Ubper	Eden Valley Villages (Hitton, Murton, Dufton, Sandford, Southy, Kitty Thomas	Eden Classics Council	11
M-554	Eden Velley (Culgelth, Lazonby, Eden Hall, Langeethby)	Eden District Council	10
1,088	r Eden Valley (Armsthealte)	Eden District Council	6
Trail		Eden District Council	4
Greys	tois	Eden District Council	3
	vidge Mil	Eden District Council	
- NAME	has felixide villages. (Croglin, Renerick, Currewe, Gamelaby, Glassonby) met Valley (Norland, Crooby Reversevoth, Maudia Meaburn, Kingerseaburn)	Eden District Council Eden District Council	0
	d Valey (Veston Relany, Plumaton, Bengave, Laithea)	Eden District Council	5
Ghip	A DESCRIPTION OF THE PARTY OF T	Eden District Council	10
-		EDEN DISTRICT TOTAL	
			433
	al (Including Helalington Milla)	South Lakeland District Council	1967
	side	South Lakeland District Council	60
Game	e Bridge	South Lakeland District Council South Lakeland District Council	5 22
	ey Windernere	South Lakeland Datrict Council South Lakeland Datrict Council	22
Grant		South Lakeland Datrict Council South Lakeland Diatrict Council	73
Anthia		South Lakeland District Council	10
LIDY		South Lakeland District Council	20
Coria	40A	South Lakeland District Council	2
Havis		South Lakeland District Council	0
	tele & Elterwater, Sileshelth Bridge	South Lakeland District Council	0
	todd, apark bridge	South Lakeland District Council	3
	tarrow (River Laver)	South Lakeland District Council	22
	Cartnell Grance-Over-Sanda, Lindale	South Lakeland District Council	4
Fund	es Perinsula (Barrow, Calton-In-Furness, Uventori) teck Bridge	SLDC/ Barrow District Council South Lakeland District Council	0
Chaint	seck Singe (on Kendel)	South Lakeland Diatrict Council South Lakeland Diatrict Council	
	on (Minhospi)	South Lakeland District Council	54
Inge		South Lakeland District Council	6
		SOUTH LANELAND TOTAL	
-			2271
		GRAND TOTAL	6140

Local Authority:	No of Properties Flooded as of 29.12.2016
Allerdale	1324
Barrow	TBC
Carlisle City	2112
Copeland	TBC
Eden	433
SLDC	2271
GRAND TOTAL:	6140



