# Flood Risk Management Group Action Plan

### i) "Live" capital projects

# Table 1: Live Capital Projects

Location	Scheme / Works Description	Funding Source	Funding Allocated	Progress	Target Completion Date
Tirley	Flood attenuation measures	Gloucestershire County Council	£135,000	Separate detailed update to be given at meeting on progress and discussions with Parish Council.	Winter 2015
Chaceley	Diversion of drainage channel & reopening outfalls	Gloucestershire County Council	£45,000	Ongoing work at Tirley is taking priority. Therefore preferred option to create a new twin outlet (which will ease pressure on the existing EA outlet at Chaceley Stock) has been reprogramed	Spring 2016

#### ii) Tewkesbury Borough Council Programme of Watercourse Maintenance

Tewkesbury Borough Council (TBC) owns various parcels of land across the Borough and some of these have watercourses either running through them or adjacent to them. This means that Tewkesbury Borough Council is a 'riparian owner' with responsibilities to maintain these watercourses in good condition.

In early 2010 TBC agreed to increase the land drainage revenue budget; in order to allow for routine maintenance work to be carried out.

	Location	Parish	Works	Estimated Length (m)	Cost
1	Bramble Chase	Bishops Cleeve	Flail cutting of banks (adjacent Gabions)	50	£170.00
2	Hayfield Way	Bishops Cleeve	Unblock outfall and ditch	sum	£1,019.75
3	Oldacre Drive	Bishops Cleeve	Flail cutting of banks	250	£162.50
4	Oldacre Drive (By pass ditch)	Bishops Cleeve	De silt	50	£1,000.00
5	Oldacre Dr/Millham Rd	Bishops Cleeve	Fallen Trees (Blocking watercourse)	sum	£550.00
6	Tobyfield Close	Bishops Cleeve	Flail cutting of banks (walk through cut)	20	£126.00
7	Coopers View	Brockworth	Flail cutting of banks (walk through cut)	406	£407.00
8	Horsbere Brook	Brockworth	Rope Swing removal blockages cleared	Sum	£140.00
9	Horsbere Brook	Brockworth	Flail cutting of banks (walk through cut)	500	£2,500.00
10	Horsbere Brook	Brockworth	Fallen Trees	Sum	£1,450.00
11	Chargrove Lane	Shurdington	Blockage & vegetation removal (Nature Reserve)	180	£1,000.00
12	Carrant Brook, Mitton	Tewkesbury	Split tree on watercourse	sum	£73.02
13	Lankett Lane	Tewkesbury	De silt & flail cutting of bank (A lot of fly tipped material)	180	£1,800.00
14	Lower Lode Lane	Tewkesbury	Fallen tree removals (from river Avon)	sum	£1,740.00
15	Lower Lode La/Bloody Meadow	Tewkesbury	Fallen tree removals (Blocking watercourse)	Fallen tree removals sum	
16	Mill Avon	Tewkesbury	Vegetation and tree clearance sum (Access diffcult - by Glos Road)		£7,020.00
17	The Vineyards	Tewkesbury	Flail cutting of banks	446	£289.90

Table 2: Completed	Tewkesbury Borough Council owned watercourse maintenance works 2015 – 2016

18	Honeybourne Meadow	Woodmancote	Blockage removal + tree clearance	sum	£700.00
					£20,698.17

# Table 3: Tewkesbury Borough Council owned watercourse maintenance works proposed 2015/16

	Location					
1	Kings Gate	Ashchurch Rural	Flail cutting of banks	181	£271.50	
2	Bramble Chase	Bishops Cleeve	Flail cutting of banks	330	£214.50	
3	Finlay Way	Bishops Cleeve	Flail cutting of banks	420	£273.00	
4	Hayfield Way	Bishops Cleeve	De silt & flail cutting of bank	512	£2,560.00	
5	Stoke Road	Bishops Cleeve	Flail cutting of banks	55	£82.50	
6	The Grange	Bishops Cleeve	Flail cutting of banks (walk through cut)	275	£1,375.00	
7	Voxwell Lane	Bishops Cleeve	Flail cutting of banks	100	£350.00	
8	Ermin Park	Brockworth	Flail cutting of banks (walk through cut)	200	£1,000.00	
9	Green Way Road	Brockworth	Flail cutting of banks and de silt (Balancing pond)	50	£250.00	
10	Horsbere Brook	Brockworth	Collapsed banks assesment work up scheme to repair	sum	£3,635.00	
11	Grenville Close	Churchdown	Flail cutting of banks (walk through cut)	600	£3,000.00	
12	Parkside Close	Churchdown	De silt & flail cutting of bank	66	£330.00	
13	Pineholt	Hucclecote	Clearnce Around Pond Area	Sum	£500.00	
14	Pineholt	Hucclecote	Assessment and works to secure slipping banks	sum	£3,500.00	
15	Rookery Road	Innsworth	Flail cutting of banks	8	£50.00	
16	Fircoft Road	Longford	Flail cutting of banks 115		£345.00	
17	Tip Road	Stoke Orchard	Flail cutting of banks and de silt	100	£1,500.00	
18	Bloody Meadow	Tewkesbury	De silt & flail cutting of bank	440	£2,200.00	

19	Carrant Brook	Tewkesbury	Flail cutting of banks	500	£325.00
20	Cricket ground	Tewkesbury	Flail cutting of banks	265	£265.00
21	Lincoln Green Lane	Tewkesbury	Flail cutting of banks	550	£357.50
22	Rails Meadow	Tewkesbury	De Silt	395	£3,950.00
23	Beauchamp Road	Walton Cardiff	Clearance of reeds	sum	£500.00
24	Crown Road	Walton Cardiff	Clearance of reeds	sum	£500.00
25	Honeybourne Meadow	Woodmancote	De silt concrete channel	sum	£1,000.00
26	Various Sites	Various	Footbridges over watercourses	sum	£1,000.00
			inspection and repairs		
					£29,334.00

All works are subject to current quoted costs. Flail cutting and vegetation clearance will be carried out October 2015 – March 2016.

### Table 4 – Insurance claim

	Location	Parish	Works	Estimated Length (m)	Cost
1	9 The Highgrove (Structural Engineers - Employed to work out budget costs and alternative schemes)	Bishops Cleeve	Banks collapsing rear of garden adjoining The Grange Watercourse	N/A	£4,300.00

#### Table 5 – Nature Reserve Lease, Priors Park, Tewkesbury

A 30 year lease was sign on 23 June 2015 by the Tewkesbury Nature Reserve. The table below indicates the locations of land drainage items that are now managed by them as part of their lease agreement.

	Location	Parish	Works	Estimated Length (m)	Cost
1	Barton Court	Tewkesbury	Clearance Works	170	N/A
2	Cam Brook	Tewkesbury	Clearance Works	180	N/A
3	Swilgate River	Tewkesbury	Clearance Works	1480	N/A
4	Reed Beds and Ponds	Tewkesbury	Clearance Works	sum	N/A

# iii) Update on Grant Applications (including Flood Defence Grant in Aid)

# Table 6: Update on Grant Applications (including Flood Defence Grant in Aid); Existing Schemes

Location	Scheme / Works Description	Funding Source	Funding Allocated	Progress	Target Completion Date
Bishop's Cleeve, Woodmancote and Southam	Surface Water Management Plan (SWMP) identified a range of measures including diversion, storage and property protection	FDGiA	Estimated at ~ £1M	This is a GCC scheme as Lead Local Flood Authority Initial package of works being developed in association with Parish Council. These options will then be worked up, with detailed design to follow.	2020
Churchdown	Surface water flood alleviation, via re profiling the existing ground levels	FDGiA	£124,000	This is a GCC scheme as Lead Local Flood Authority Investigative/design work and negotiation with land owners is in progress but yet to be finalised	tbc
Kenulf Road, Winchcombe	Individual Property Level Protection	FDGiA	£40,000	Installation of recommended measures is complete. We have been providing support to a resident who questioned the level of works at their property. One other resident may need support of a query regarding some supplementary snagging work but as yet this has not been confirmed by them.	Completed June 2015

# iv) Capital Improvement to Properties in Tewkesbury Borough (Repair and Renew Grant)

### Table 7

(GCF = Gloucestershire Community Foundation)

Repair and Renew	Grant			GCF gr	rant	
	No. grants	Measures taken	Amount	No. grants	Amount	Commentary
Apperley	2	flood barriers, pumps, generator	£9,973.55	1	£500.00	
Ashleworth	3	flood barriers, doors, flood survey, floor repair	£10,355.60			Possible bund at White End proposed by local residents, but Glos has no money to apply for in 2015- 16
Chaceley	14	flood walls, flood barriers, flood doors, raising floors, pumps, repair bund	£92,250.90	3	£4,804.00	All allocated to flood protection, including place of safety improved, and outfall reconfiguration scheme in preparation
Coombe Hill	6	associated work and bund construction	£24,859.73			Bund constructed
Deerhurst and Deerhurst Walton	10	Flood scheme with gates and pump in place round central village	£49,567.97	5	£5,000.00	Earth and blue clay flood bund constructed to protect 9 homes
Forthampton	2	waterproof walls, flood barriers,flood doors,floors, pumps	£10,000.00	1	£1,000.00	
Haw Bridge Tirley	16	flood walls, flood barriers, flood doors, pumps,air brick covers,floor levels	£73,561.02	1	£1,500.00	Minimally affected by Tirley attenuation scheme?
Longford	9	flood walls, land drains, barriers and pumping	£34,572.11	1	£414.00	
Maisemore	6	flood fencing, flood walls and barriers,flood doors,raise floors, repoint with water resistant mortar	£39,774.79			Highways road scheme applied for in 2015
Minsterworth	3	flood walls, electricity sockets raised	£10,859.04	3	£9,000.00	Place of safety improved
Norton	1	flood wall, gate and barriers	£5,000.00			

Oxenton	1	flood barriers	£5,000.00			
Sandhurst	1	raise electrics, stone floor laid	£5,000.00			
Sandhurst Lane		flood barriers, raised floors,equipment and sockets, flood doors, pumps and generators,	£44,760.67	2	£1,282.00	Sandhurst and Longford Flood Action Group: egress main concern
Tewkesbury Town	23	Flood walls, gabions, flood barriers and doors, air bricks and covers,pumps, waterproofing walls, and raise floors	£87,436.28	2	£1,000.00	Maintenance event
The Leigh	3	flood walls, barriers, sumps and pumps, generator	£12,096.40	1	£1,000.00	(outside existing bund)
Tirley	9	flood walls, bund, permanent and temporary barriers, flood doors, pumps, non- return valves, waterproof walls,air bricks & cover	£44,771.12	1	£1,000.00	Tirley works under construction: outfall and attenuation
Twigworth	3	airbricks and covers, door guards,barriers pump and generator	£12,736.00			
			£572,575.18		£26,500.00	

### v) Update on Progress at Tirley

#### Table 8

NAME OF SCHEME TIRLEY - Outfall	Completed					
SCHEME REFERENCE WITHIN NEW FINANCIALS	TIR/OUT/001					
SUB GRANT AMOUNT (£) £55,000.0	0					

	FINANCE REPORT													
Order	Date	Contractor	Description of works	Estimate cost	Invoice number	Actual cost ex	Actual cost inc	Payee	Expenditure	Uncommitted	Actual balance	Date sent	Invoice raised	to GCC to reclaim
number				(£)		VAT (£)	VAT (£)		code	balance (£)	(£)	for payment	(date	e and £)
CS 22739	04/12/14	Willems	Outfall excavation	£4,975.00	2151	£3,200.00	£3,840.00	contractor	DRAI/4100	£51,800.00	£51,800.00			
CS 22739	17/04/15	Willems	Temp. secure outfall	£500.00		£471.77	£566.12	contractor	DRAI/4100	£51,328.23	£51,328.23			
CS 22909	08/06/15	Wilkinson	Heras fencing	£500.00	13524	£345.60	£414.72	contractor	GCCF/4100	£50,982.63	£50,982.63			
CS22935	20/05/15	Wilkinson	Materials for outfall	£10,000.00	13488	£10,000.00	£12,000.00	contractor	GCCF/4100	£40,982.63	£40,982.63	25/05/2015		
CS22941	03/06/15	Wilkinson	site clearance	£800.00	13589	£750.00	£900.00	contractor	GCCF/4100	£40,232.63	£40,232.63	24/07/2015		
CS23281	22/07/15	Wilkinson	Outfall re-instatement work	£23,500.00	13588	£23,500.00	£28,200.00	contractor	EARM8170ER16	£16,732.63	£16,732.63	10/08/2015	10/08/2015	£28,421.77
CS23283	24/07/15	Wilkinson	Safety railings & stairs	£14,000.00		£13,720.00	£16,464.00		GCCF/4100	£3,012.63	£3,012.63			
							£0.00			£3,012.63	£3,012.63			

#### Table 9

NAME OF SCHEME TIRLEY - Grove Cottage														
SCHEME R	EFERENCE	WITHIN NEW	FINANCIALS	TIR/GRV/001										
SUB GRAN	T AMOUNT	(£)	£3,000.00											
						FINANCE REPORT								
Order	Date	Contractor	Description of works	Estimate cost	Invoice number		Actual cost inc	Payee	Expenditure	Uncommitted	Actual balance	Date sent for	Invoice raised	to GCC to reclaim
Order number	Date	Contractor	Description of works	Estimate cost (£)	Invoice number		Actual cost inc VAT (£)	Payee	Expenditure code	Uncommitted balance (£)	Actual balance (£)	Date sent for payment		to GCC to reclaim Id date)
	Date		Description of works Ditch reinstatement		Invoice number	Actual cost ex		Payee	•	balance (£)				

#### Table 10

NAME OF SCHEME	TIRLEY - H	am Rd crossing	Completed										
SCHEME REFERENCE	WITHIN NEW	FINANCIALS	TIR/HAM/001										
SUB GRANT AMOUNT	SUB GRANT AMOUNT (£) £12,000.00												
	EINANCE DEDODT												

	FINANCE REPORT													
Order	Date	Contractor	Description of works	Estimate cost	Invoice number	Actual cost ex	Actual cost inc	Payee	Expenditure	Uncommitted	Actual balance	Date sent	Invoice raised	to GCC to reclaim
number				(£)		VAT (£)	VAT (£)		code	balance (£)	(£)	for	( date and £)	
												payment		
22945	12/06/15	GCC	Section 50 Licence	£360.00	1800361344	£360.00	£360.00	GCC	GCCF/4100	£11,640.00	£11,640.00			
CS23282	24/07/15	Wilkinson	Supply/install 900mm culvert	£10,000.00	13637	£9,900.00	£11,880.00	contractor	EARM8170ER16	£1,740.00	£1,740.00	10/08/2015	09/09/2015	£10,260.00
										£1,740.00	£1,740.00			

#### Table 11

NAME OF S	CHEME	TIRLEY - N	latural Flood Managemen	t (NFM)										
SCHEME R	EFERENCI	E WITHIN NEW	FINANCIALS	TIR/NFM/001										
SUB GRAN	SUB GRANT AMOUNT (£) £80,000.00													
	FINANCE REPORT													

	FINANCE REPORT														
C	Order	Date	Contractor	Description of works	Estimate cost	Invoice number	Actual cost ex	Actual cost inc	Payee	Expenditure	Uncommitted	Actual balance	Date sent for	Invoice raised to GCC to reclain	
nı	umber				(£)		VAT (£)	VAT (£)		code	balance (£)	(£)	payment	(£ and date)	
				Procurement of clay	£20,000.00					GCCF/4100	£60,000.00	£80,000.00			
				Construction of flood storage	£40,000.00					GCCF/4100	£20,000.00	£80,000.00			
				In ditch barriers	£20,000.00					GCCF/4100	£0.00	£80,000.00			
											£0.00	£80,000.00			