## Water Asset Management Working Group

## Action Plan for Improved Council Water Asset Management and Emergency Response (Updated March 2006)

RECO NO.	THEME	RECOMMENDATION	BENEFITS	RESOURCES REQUIRED ?	COST ESTIMATE (FULL-YEAR EFFECT) ?	CAPITAL/ REVENUE ?	ON-GOING / ONE-OFF ?	DEADLINE	ACTION OWNER	COMMENTS
1	Council Policy	Draft Policy for approval by CMT and Exec Board on 'Maintaining Water Resources and Responding to Flood Incidents'. Policy to include appendix setting-out legal responsibilities and permissive powers in this area.	Provides clarity regarding Council's legal roles and responsibilities.	Set out under other recos below.	N/A	N/A	N/A	May 2006	R Davies	Document complete. To be submitted to Exec Board for approval with progress report on 17 May 2006.
2		Director of Development to act as 'Drainage Champion' on CMT and Development Department to act as Lead Department for the co-ordination of drainage and watercourse-related issues within the Council	Ensures that water-related issues receive an appropriate management profile and regular reports made to Asset Management Group.	N/A	N/A	N/A	N/A	May 05	J Dent	In place. Members of the working group meet regularly with Director of Development.
3	Watercourse Maintenance and Land Drainage	Develop costed proposals for setting-up or procuring a one-stop 'Water Asset Management Service' to be responsible for watercourse inspection, preventative maintenance and clearance to fulfil the Council's responsibilities for riparian ownership and under Land Drainage Act as well as to respond to emergencies on a 24 hour basis. Proposals to include staffing levels, specialist skills and equipment, options for locating and managing this team, role of external specialist service might need to be retained on term contracts.	undertake its legal duties as a riparian owner and as	Trained staff plus specialist equipment (eg pumps) and vehicles	£645,000	R	On-going	Feb 2006	D Sellers	A "Schedule of Rates" contract is now in place with Duffy's (as of 01/02/06) for the undertaking of work commissioned and directed by Land Drainage on the basis of priorities. The contract includes provision for call-out by PEPU for emergencies.
4		Fund and recruit 4 additional posts currently in Land Drainage structure for providing technical advice, drainage enforcement, reviewing planning applications, maintaining drainage infrastructure records.	Ensures that Section can adequately enforce on land drainage issues and advise on new developments posing flood risks.	4 new staff  Furniture etc  Out-of hours standby allowance for emergency response	£120,000 £7,000 £10,000	R R	On-going One-off	April 2006	J Dent	Recruitment process is in progress.
5		Ensure that all new significant developments fully consider flood risks and encompass sustainable drainage funded by developers where possible.	Ensures the risk of flooding in Leeds not increased by new developments and diminished in the long-term.	See 4 above	See 4 above	R	On-going	June 2006  Dec 2006	I Andrews	Additional Land Drainage staff will help to ensure this. Development Dept is commissioning a Flood Risk Management Strategy for Leeds to underpin this.
6		Develop proposals for systems for the improved recording and maintenance of records of water assets (watercourses, culverts, ponds, lakes), including those owned by the Council and cost the development of these for inclusion in the capital programme.	maintained on the basis of	IT to assist Land Drainage in migrating ArcGIS to corporate architecture. Dependent on extra staff identified at item 4.	To be determined.	C/R	On-going	TBC	D Sellers	This is in development.
7		Develop a package of measures to support private riparian owners and communities to fulfil their responsibilities, such as:  targeted 'flood fairs' and public information campaigns for at-risk households on responsibilities of riparian ownership and flood protection products available.  negotiated call-off contracts with specialist companies together with easy payment schemes training and briefings.	owners and general public receive appropriate	Officer time (LCC and EA)	Within existing resources.	R	On-going	June 2006	D Sellers/ R Davies	PEPU has been actively liaising with the EA and other partners via the West Yorks Flooding sub-group and National Flood Forum and a Flood Fair will be taking place on 7 May.  Land Drainage is investigating the possibility of riparian owners using Duffy's to undertake work on their behalf.
8	Emergency Response	Agree interim 24 hour call-out system for responding to flooding incidents prior to new arrangements given that		Staff to remove blockages from	To be determined.	R	For period prior to		D Sellers/ R Davies	Completed.

		there are no Council staff trained to undertake this work nor do departments have standby in place.	terms of both prevention and mitigation.	watercourses Vehicles			completion to item 3.			
9		Agree protocol on co-ordination and response to flooding incidents with all partner agencies.	Ensures that all organisations understand and commit to their specific roles in a flood emergency.	N/A	N/A	N/A	On-going	April 2006	R Davies	A West Yorks multi-agency flood response protocol with clear roles and responsibilities was ratified in Dec 2005 by partners and is being incorporated into agencies' Flood Plans.
10		Develop costed proposals for a 24 hour emergency response capability to potential and actual incidents on Council-owned and other watercourses (x ref to reco. 3).	Ensures that Council can undertake its legal duties under Civil Contingencies Act and as enforcement authority.	Trained staff plus specialist equipment (eg pumps) and vehicles	To be included in reco. 3. Above.	R	On-going	Feb 2006	D Sellers / R Davies	In place. See item 3.
11		Revise approach to provision and deployment of sandbags:  maintaining limited stocks of filled sandbags together with quantities of sand and unfilled bags purchase dedicated sandbag-filling hoppers to fill sandbags rapidly either at depots or on the back of trucks near to the scene of flooding.	Ensures that Highways do not have to maintain large stocks of ready-filled sandbags which deteriorate.	Sandbag hoppers x 2 Sand Sandbags	£7,000 x 2 £3,000 for stocks of sand	C/R	One-off	Dec 2005	P Markham	In place. Additional supplies of sand, empty bags and sandbag hoppers located at all three depots.
12		Develop proposal for a roll-on/roll-off Flood Resource Pod with WYF&RS and EA which could be rapidly deployed by the Fire Service from a Leeds Fire Station to mitigate flooding as far as possible.	Ensure that properties at risk of flooding in an incident protected as far as possible limiting impact upon a community.	Pod including airbrick covers, doorblocks, large plastic bags for furniture etc	To be determined	C/R	On-going	Sept 2006	R Davies	WYFRS rejected proposals developed by LCC given that this is not a statutory service. PEPU is continuing to press for this idea to be developed. PEPU is now investigating how LCC might be able to deploy better post-flood resources to support communities and has purchased a stock of cleanup supplies for this purpose.
13		Explore options with EA/YWS/Chief Exec's for developing:  a One-Stop Flood Reporting Telephone Line able to handle all flooding reports whether on the highway, housing, gardens etc.  a checklist of questions and a flowchart for use in Environmental Call Centre which could be used to establish what form of flooding was involved and who this should be referred to.	effectively.	To be determined Checklists	To be determined  Existing resources	determined	determined One-off	On-going Apr 2006	R Davies D Sellers	The West Yorkshire Flooding sub-group (in conjunction with Land Drainage) has produced a draft 'decision tree' identifying sources of and responses to flooding for telephone operators to use. This is subject to consultation. Discussions are continuing with the Contact Centre on how flooding is reported.
14		Asset Management Unit to configure the Corporate Property Database so that Council beck ownership can be rapidly determined by officers investigating impediments to flow.  In longer term, net LCC ownership data to be made available via 'Mapping Leeds' and to ArcGIS users.	Ensure that appropriate ownership data available for easy interrogation by Land Drainage and others to address problems when they arise.	Additional Land Terrier software licences for Land Drainage section.	£1,000  Existing resources.	R	On-going	On-going	J Ramsden	Land Drainage staff now have access to the Terrier System. The proposed GIS summary data is under development.
15	Highways and Street Cleansing	Identify known flooding hotspots on roads and highway gullies and prepare a report for City Services SMT outlining options.	Ensures that flood risk locations can be prioritised for remedial action.	N/A	Within existing resources.	R	One-off	July 2005	P Markham	Completed.

16	Review gully emptying service on a provisional basis (subject to a future full survey and assessment of servicing frequency) to ensure an effective gully cleansing regime during and out-of-hours.	Ensures that risk of gullies causing or contributing to flooding is diminished.	Increased no. of gully cleaners leased from 4 to 6 to enable 1 per area and 1 for reactive work. Standby allowance	£258,000 £25,000	R	On-going	Oct 2005	S Smith/ P Markham	Streetscene Services has had enhanced arrangements in place since Oct 2005 with two extra vehicles leased and additional staff recruited. They are in the process of formalising call-out arrangements, but have interim arrangements in place. Streetscene has higher frequency cleaning in place for flood prone areas.
17	Highway Services to develop a short-term programme of data gathering and risk assessment for highway culverts less than 900mm diameter in order to ensure that culvert cleaning is carried out in most vulnerable areas.	Ensures that service provision can be planned on the basis of risk-based maintenance.	Technician plus van for 6 months for initial survey.  Existing contract arrangements to carryout culvert cleaning.	Existing highway maintenance budget	R	One-off On-going	March 2006	P Markham/ S Smith	Around 630 highways culverts have now been surveyed and the data input logged into a database for export into GIS. Most of surveyed locations have been risk-assessed (e.g. potential impact on properties) and a report is in preparation to highlight locations most at risk and requiring maintenance or further work. A further 70+ sites should be assessed by the end of March.
18	Highway Services/Environmental Services to identify requirements for linking into the corporate ArcGIS system necessitating mapping locations of all gullies, drains and highway culverts; implement data collection; determine existing/needed capacities of highway drains and culverts and carry out risk assessment of all assets to determine an effective gully-emptying regime and a programme of capital improvements to the system where required based on risk/need.	Ensures that service provision can be provided within the framework of a Highway Asset Management Plan.		£20,000 for staff time to set-up GIS and management (nb gullies only) £5,000  Add'I survey work on extent & nature of highway drainage system and culverts will be extensive. Best estimate £100,000 p.a. for 5 years.  Future capital costs dependent on outcome of survey work		Rolling programme over an initial 5 year period.	Mar 2006  March 2011	P Markham	Data collection devices have been procured and appropriate software developed. Mapping of locations will now begin and this work is informing work on the Highway Asset Management Plan.
19	Bridges Section to develop a programme of data gathering and risk assessment for large highway culverts and bridges susceptible to blockage for remedial action, and continue a reactive programme of culvert clearing.	undertake its legal duties under Land Drainage Act, Public Health Act and Highways Act, that service provision can be planned on the basis of risk-based maintenance and that capital bids can be made to fund replacement programmes.	Engineer Time  Works Cost for cleaning	£5,000 £10,000 p.a.	R	One-off On-going	July 2005 Aug 2005	R Kay	A programme of invert cleaning is continuing for large culverts and bridges susceptible to blockage. Data gathering work is being linked with on-going asset valuation work. The current stage of the asset valuation programme includes structures where details of cross sections and this is being gathered for capacity checking.
20	Bridges Section to develop a rolling programme of data gathering and risk assessment for culverts and bridges susceptible to flooding due to insufficient culvert capacity, and develop a Capital Programme for the upgrading of highway culverts and bridges on a priority	undertake its legal duties under Land Drainage Act, Public Health Act and	Engineer Time (Bridges Staff) Engineer Time Land Drainage	£12,000 p.a. £4,000 p.a.	R	On-going	Sep 2010	R Kay	See 19 above.

28	Specific Locations	Explore development of flood alleviation measures for the whole Wyke Beck catchment on a holistic basis (i.e. taking into account sewers, watercourses, and highway drains.	Ensures that an area with proven flood risk is provided with an appropriate flood alleviation scheme.	Staff time for EA and YWS consultants, and LCC staff in modelling the catchment.	To be determined	С	One-off	On-going	Env Agency / D Sellers	EA has responsibility for enforcement from Apr 2006 and has commissioned consultants to build a full
27		Develop annual partnership water asset review meetings between senior officers of LCC, YWS and the EA to ensure that key issues are given appropriate attention within all organisations.	Ensures that issues of joint concern are given senior management support in key	Staff time	N/A	N/A	On-going	Sep 2005	J Dent	In place.
26	Partnership Working	Initiate a multi-agency technical forum with partners from Environment Agency and Yorkshire Water to meet regularly.	Ensures that organisations with a stake in the water infrastructure consider issues of joint concern, follow-up incidents, share data, and agree risks and maintenance frequencies to create more effective arrangements for strategic planning, flood prevention and response.	Staff time	N/A	N/A	On-going	Sep 2005	D Sellers	In place.
25		Commission dam breach assessment for Waterloo Lake at Roundhay Park.	Ensures that an impact assessment of an identified hazard is undertaken to determine the need for and scope of contingency planning.	Consultants' and Land Drainage time.	£5,000	С	One-off	June 2006	D Sellers	This work was subject to a tendering exercise. An initial meeting has taken place with the successful Consultant and work is underway.
24		Review data collected regarding all LCC lakes, reservoirs and dams to:  establish status (i.e. Reservoirs Act or not ?)  assess their condition and the risks associated with the asset  identify any remedial works needed  identify requirements for on-going inspection regimes  determine contingency planning needs in line with Water Act and risk ratings  consider how these assets could be used for better recreational use consistent with Council LCC objectives around 'neighbourhoods being safe, clean, green and well-maintained' and 'people living healthy, fulfilling lives'.	Ensures that identified potential hazards are subjected to risk assessment, that risks are appropriately treated and that assets are maintained and used to their full potential for the benefit of the community.	Staff time	Dependent upon resources identified in reco.4.	R	One-off	June 2006	D Sellers/J Davies	To be undertaken using additional staffing (see reco. 4). Discussions already occurring between L&L and Land Drainage regarding several bodies of water.  LCC is also developing a template plan for the offsite consequences of dam breaches for DEFRA to use in guidance currently being finalised.
23	Lakes, Reservoirs and Dams	Identify and record all lakes, reservoirs and dams within LCC boundaries on Corporate GIS system (ArcSDE). See Action 8 above.	Ensures that there is a system in place to facilitate inspection and maintenance on a risk-basis.	Staff time	Dependent upon resources identified in reco.4.	R	One-off	June 2006	D Sellers	To be undertaken using additional staffing (see reco. 4)
22		Drainage systems data to be obtained from developers as part of all highway adoptions.	Ensures that service provision can be planned on the basis of risk-based maintenance.	Staff time to follow-up developers	Existing resources	R	On-going	Apr 2006 onwards	R Coello	In progress.
21		All new road schemes to include data mapping of highways water features on system compatible with corporate ArcGIS as part of the planning process.	replacement programmes. Ensure that the Council can defend itself against actions of the 'Bybrook Barn v Kent CC' type. Ensures that service provision can be planned on the basis of risk-based maintenance.	Staff time	Existing resources	С	On-going	Apr 2006 onwards	R Coello	This is subject to on-going discussions relating to the corporate GIS system.
		basis.  Developer funding to be sought via s.106 contributions where appropriate.	provision can be planned on the basis of risk-based maintenance and that capital bids can be made to fund							

				Cost of any alleviation scheme. time						hydraulic and hydrological model. An aerial LIDAR survey was commissioned to assist with this. The modelling has now been completed and the EA has received a draft final report The EA will now have to determine whether remedial works are required. Level monitoring telemetry has been installed at South Parkway Approach.  YWS is mothballing their 'new' storage tank at Wykebeck Valley Rd which was subject to controversy and building a new high volume storage tank at the junction of Foundry Lane and Oakwood Lane.  Construction is expected to begin at the end of March. YWS is also commissioning consultants to model local sewerage system and tie this in with the EA beck model.  The £1.2bio East & South-East Leeds (EASEL) Programme will include substantial changes to drainage systems and the Wyke Beck and require joint working with YWS and EA. Initial contacts made.  Land Drainage has liaised directly with the Dunhills action group on work.
29		Learning & Leisure to install a primary trash screen across Wyke Beck upstream of York Road to stop the migration of large scale detritus downstream.	Ensures that large debris cannot progress beyond York Road and create blockages in the Dunhills area.	Purchase of trash screen and installation On-going screen maintenance.	To be determined	C/R	One-off and on-going	d Mar 2006	J Davies	EA has approved installation of a trash screen and Duffy's have installed this for LCC. Forestry has cleared growth on the side of beck under ecologists' supervision.
30		Initiate enhanced programme of inspection of Wyke Beck (including Halton Moor Road grid), including logging of inspections and photographic recording of the condition and rigorous enforcement.	Ensures that problems in flood-risk area identified promptly for remedial action.	Staff time	Within existing resources	R	On-going	May 2005	D Sellers	In place.
31		Install cut-off drains at King George V playing fields (behind Foundry Lane) and at the Chantrys in Colton to intercept surface run-off.	Ensures that known cause of flooding mitigated and likelihood of claims against Council limited.	Drain plus installation	Within existing resources	C/R	One-off	July 2005	J Davies	Complete.
32	Flytipping and Enforcement	Take action within legal powers to reduce the number of abandoned shopping trolleys.	Ensures that trolleys are less likely to cause blockages and flooding in local watercourses.	Staff time, collection costs and storage costs	£60,000	R	On-going	Feb 2006	G Wilson	Powers are now in place. Enforcement has also identified a company which will sweep the city and watercourses to

						Apr 2006		identify and retrieve shopping trolleys at no cost to the Council. It will respond to trolley finds on a 24 hour basis through a contact number.
33	Ensure secure trolley and industrial storage systems are considered at planning application stage for all new relevant retail premises located near watercourses.	N/A	N/A	N/A	On-going	Mar 2006	I Andrews	In place.