

# The Wastewater and Urban Drainage Conference

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### Paper 7: Local Authority Capacity Building.

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#### **Abstract**

Following the implementation of the Flood Risk Regulations (2009) and the Floods and Water Management Act (2010), the Association of Greater Manchester Authorities (AGMA) employed a joint Halcrow-IBM team to investigate the existing flood risk management capacity and capability within the ten Greater Manchester authorities. The aim of the study was to identify the existing flood risk management capacity and capability and to identify the most effective operational model for delivering the new responsibilities resulting from the new legislation.

The study identified that there are a number of issues surrounding flood risk management capacity and capability within Greater Manchester, notably:

- There is significant variation in capacity, capability and organisational set-up between the ten Greater Manchester authorities.
- There is an ageing population working in flood risk management in Greater Manchester authorities.
- There is a lack of specific flood risk management experience and expertise across Greater Manchester authorities.
- There is a lack of flood risk management capacity across AGMA authorities with the equivalent of less than 1.5 Full Time Equivalents (FTE) per authority working in flood risk management.
- The size and number of dedicated Drainage teams has dropped significantly since United Utilities took over the sewerage undertaker role. There is a large variation in the team size and drainage capability between the authorities, with some authorities having no drainage capability.

Following a multi-criteria appraisal, the study concluded that some form of collaborative working between the Greater Manchester authorities would be the most effective operational delivery model in light of the new legislation. This would either be from pooling all Greater Manchester drainage resources in to one team, or by operating in 'clusters' with three or four authorities working collaboratively to deliver the new responsibilities. This decision on which model to implement has been referred to senior management within AGMA.

#### **Introduction**

In late 2009 and early 2010 the Floods & Water Management Act and the Flood Risk Regulations became part of British law. These new pieces of legislation aim to improve the current management of flood risk and water resources, and implement the recommendations of the Pitt Review. They impose new roles and responsibilities on Lead Local Flood Authorities and although the full implications of the legislation are not currently known, it is expected that they will result in a number of new commitments for Lead Local Flood Authorities.

The Association of Greater Manchester Authorities (AGMA) is a voluntary association that represents the collective interests of the ten local authorities within Greater Manchester and provides a number of

residual functions previously performed by the Greater Manchester County Council, such as public transport and waste management control.

In response to the new legislation, AGMA chose to investigate the existing flood risk management capacity, capability and expertise across Greater Manchester and to identify potential organisational models to deliver the new legislation. The aim was to gain an understanding of the existing capacity, and the most efficient model for future delivery of flood risk management responsibilities in light of the new legislation.

Building on the existing strategic alliance between Halcrow and IBM, a joint Halcrow-IBM team was appointed to undertake the study, with Halcrow leading the study and providing the flood risk management expertise and IBM providing the organisational management expertise.

## **Project Description and Results**

A staged approach was taken to the project, with the four stages being:

- Stage 1: Identifying the baseline
- Stage 2: Future Options
- Stage 3: Reporting
- Stage 4: Implementation.

### Stage 1: Identifying the baseline

In Stage 1 we gathered data and information to identify the existing resources and capability within the Greater Manchester authorities as well as confirming the requirements of the new legislation.

Initially a stakeholder workshop was held to introduce stakeholders to the project, and to begin understanding the general capacity and capability within the authorities.

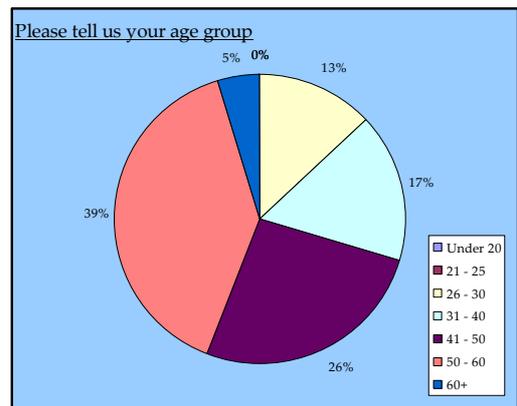
Following this, an online questionnaire was devised. Viral techniques were used to disseminate the questionnaire. Eighty-seven responses were received with a good distribution across all of the ten authorities and AGMA, and all skill areas, (Drainage/Engineering, Spatial Planning and Emergency Planning).

The results of the questionnaire identified a number of trends that could affect the ability of Greater Manchester Local Authorities to respond to the new legislation:

#### **Age:**

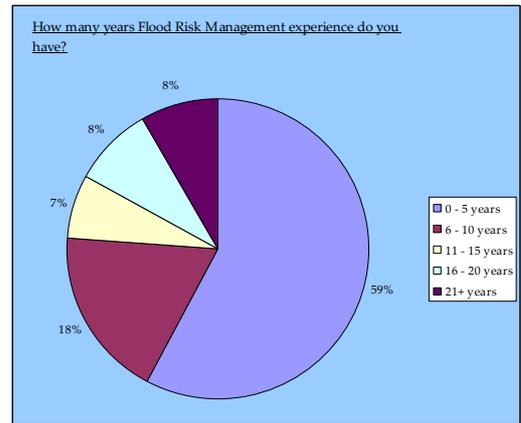
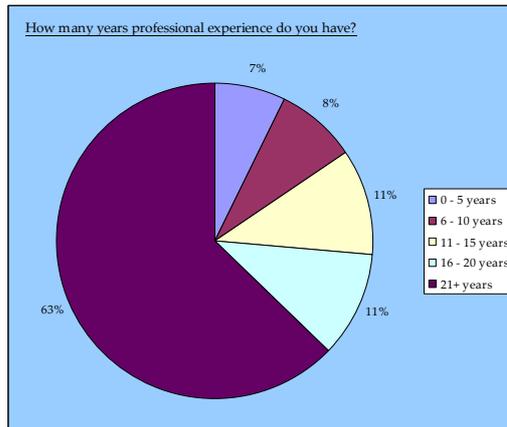
As shown on the chart to the right, there appears to be an ageing workforce in flood risk management within the AGMA authorities. 45% of those who responded to the questionnaire were over 50 and only 30% were younger than 40.

This is particularly noticeable in the Drainage and Highways skill areas where 50% of the workforce is over the age of 50. With the future public sector budget cuts, one of the Greater Manchester Chief Executives identified that it is likely that many of these people may be offered early retirement to reduce wage bills, and this could result in the loss of a significant amount of experience and expertise in a short period of time.



**Experience:**

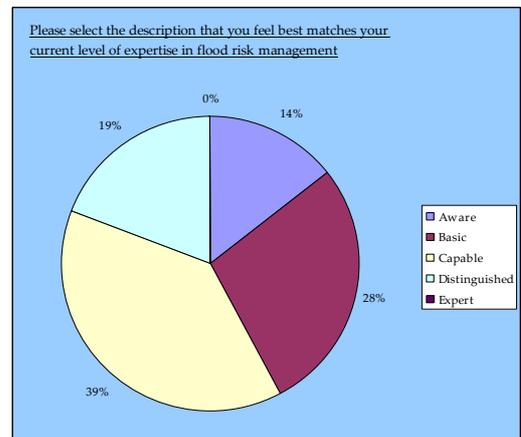
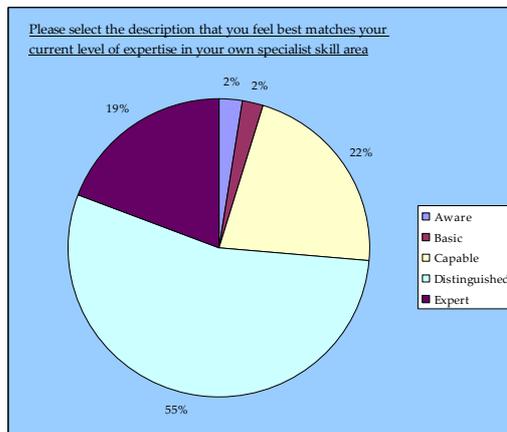
Based on the findings of the question about age, it is unsurprising that the majority of the respondents had a significant amount of professional experience, with almost 65% having over 21 years experience. This suggests that there



is a significant amount of experience within the AGMA authorities. However when this is compared with the amount of specific flood risk management experience people have, the opposite is the case with 65% claiming to have less than five years experience.

**Expertise:**

When questioned about levels of expertise the results were similar to the results for the Experience question with 75% considering themselves to be 'distinguished' or 'expert' in their own specialist skill area, whereas only 20% considered



themselves 'distinguished' in flood risk management; no-one considered themselves to be an 'expert' in flood risk management. However, 60% of respondents considered themselves to be at least 'capable' in flood risk management.

People's membership of a professional body also provides an indication of their level of expertise. 80% of respondents were members of a professional body and of these, 70% were at 'Member' or 'Fellow' level. However, as with experience and the more specific expertise question, this suggests a general high level of professional expertise, but not necessarily in flood risk management

### Capacity:

As shown in the chart to the right, the majority of people (60%) working in AGMA authorities currently spend less than half a day a week on flood risk management activities. This is perhaps not surprising in light of the responses received to the experience and expertise questions.

Combining the results, suggests that at present there is the equivalent of 13.5 Full Time Equivalents (FTEs) working on flood risk management activities within the ten Greater Manchester authorities and AGMA.

It is clear that additional capacity will need to be identified in order to fulfil the requirements of the new legislation. This is likely to require additional training and recruitment, as well as more effective operational methods for delivery.

As well as the questionnaire, a series of interviews were undertaken with key individuals within each of the authorities and AGMA. The interviews gained more specific information about the existing organisational setup and capacity within each of the authorities and resulted in flood risk management organisation charts being produced for each council.

Some of the key findings from the interviews were:

- There is significant variation in the existing flood risk management capability and expertise between the authorities and in the models by which the authorities deliver flood risk management services.
- The Spatial Planning and Emergency Planning teams are generally well set-up and organised with dedicated resources identified for flood risk management, although these resources often lack technical flood risk management expertise. It is thought that their structured organisation is due to these teams having statutory legislation that defines their role, (the Town & Country Planning Act (1990) and the Civil Contingencies Act (2004)).
- The size and number of dedicated Drainage teams has dropped significantly since United Utilities took over the sewerage undertaker role. There is a large variation in the team size and drainage capability between the authorities, with some authorities having no drainage capability.

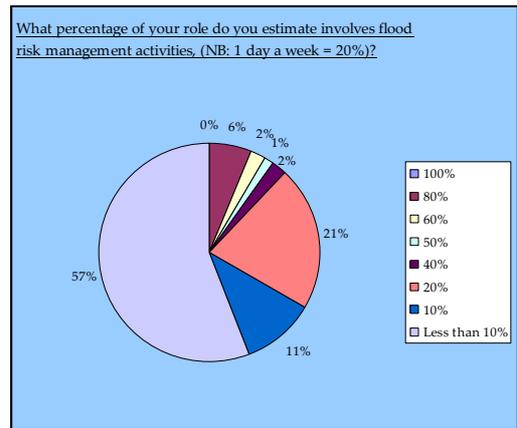
### Stage 2: Future options

In Stage 2, five potential operational models for delivering the new responsibilities within Greater Manchester were identified and appraised. The five potential models were:

- Model 1: Each Local Authority acting by itself
- Model 2: Greater Manchester Local Authorities working in collaboration at a Greater Manchester Level
- Model 3: New partnership arrangements with United Utilities and the Environment Agency
- Model 4: Delivery of work through a private sector partner
- Model 5: Greater Manchester Local Authorities working in collaboration in 'clusters' (i.e. groups of three to four Local Authorities working collaboratively)

These models were appraised using multi-criteria analysis which scored the models based on their competence in the following categories:

- Meeting the legislative requirements
- Financial – i.e. lowest cost and highest cost effectiveness



- Efficiency
- Scale – i.e. ability to operate at a Greater Manchester as well as a local scale
- People
- Technology & systems

Based on the option appraisal, Models 2 and 5 were identified as the preferred options, (see tables below). The key strengths of these models were: the efficiencies generated by collaborative working, their ease and relatively low cost of implementation, their ability to develop expertise within the authorities, their ability to operate at a range of scales and their ability to utilise existing resources.

Model 1 - Each LA Acting by Itself				
	Average Score	Competency Average	Weighting	Revised Score
Legislative Requirements	24	23	3	71
Financial	19	22	3	57
Efficiency	19	24	2	38
Scale	22	23	1	22
People	20	21	1	20
Technology/systems	22	23	1	22
<b>Total Score</b>	<b>125</b>	<b>135</b>	<b>-</b>	<b>229</b>

Model 4 - Delivery of Work Through Private Sector Partner				
	Average Score	Competency Average	Weighting	Revised Score
Legislative Requirements	23	23	3	70
Financial	21	22	3	62
Efficiency	24	24	2	48
Scale	21	23	1	21
People	19	21	1	19
Technology/systems	21	23	1	21
<b>Total Score</b>	<b>129</b>	<b>135</b>	<b>-</b>	<b>241</b>

Model 2 - GM LAs Working in Collaboration				
	Average Score	Competency Average	Weighting	Revised Score
Legislative Requirements	24	23	3	73
Financial	22	22	3	67
Efficiency	26	24	2	53
Scale	19	23	1	19
People	26	21	1	26
Technology/systems	23	23	1	23
<b>Total Score</b>	<b>149</b>	<b>135</b>	<b>-</b>	<b>260</b>

Model 5 - GM Authorities Working in Collaboration (Clusters)				
	Average Score	Competency Average	Weighting	Revised Score
Legislative Requirements	24	23	3	73
Financial	22	22	3	65
Efficiency	26	24	2	51
Scale	24	23	1	24
People	26	21	1	26
Technology	23	23	1	23
<b>Total Score</b>	<b>143</b>	<b>135</b>	<b>-</b>	<b>261</b>

Model 3 - New Partner Arrangements with EA/ UU				
	Average Score	Competency Average	Weighting	Revised Score
Legislative Requirements	19	23	3	57
Financial	26	22	3	78
Efficiency	25	24	2	50
Scale	28	23	1	28
People	16	21	1	16
Technology/systems	26	23	1	26
<b>Total Score</b>	<b>139</b>	<b>135</b>	<b>-</b>	<b>255</b>

Total Scores:		
Model 1	Each LA acting by itself	229
Model 2	GM LAs working in collaboration	260
Model 3	New partnership arrangements with UU and EA	255
Model 4	Delivery of work through private sector organisation	241
Model 5	GM LAs working in collaboration (clusters)	261

Summary of Option Appraisal Scores (N.B. Model 3 was dismissed as the EA and UU identified that they would be unable to support it)

The two preferred models scored similarly in the multi-criteria appraisal, with only point separating them. Therefore the decision on which model to implement has been referred to senior management within AGMA.

### Stage 3: Reporting

Stage 3 involved the production of a number of reports summarising the project and its findings and identified actions for taking forward the recommendations within the study. The final draft report was submitted in October 2010, and is currently being consulted on. The final report will be issued in November 2010.

Stage 3 concludes the involvement of the Halcrow-IBM consultant team.

### Stage 4: Implementation

This stage is arguably the most important and will commence once the Stage 3 report and the recommendations within it have been approved. It will be undertaken by the AGMA team.

The AGMA project management team are currently reviewing how this stage should be implemented in discussion with senior management within AGMA, including the Chief Executives.

## **Conclusions**

The project has identified a number of flood risk management capacity and capability issues within Greater Manchester Local Authorities. Some of these may impact on the ability of the authorities to take on the Lead Local Flood Authority role and the other responsibilities identified by the Flood Risk Regulations (2009) and the Floods and Water Management Act (2010). In particular the ageing workforce, particularly in the Drainage Engineering sector, may lead to a 'brain drain' in the near future with senior staff possibly being offered early retirement as a result of public sector budget cuts. Many of the new legislative requirements will require technical skills, (such as the production of flood maps and reviewing SUDs applications), therefore the general lack of flood risk management experience and expertise, needs to be addressed to enable Local Authorities to fully implement their new responsibilities.

It is thought that many of the findings of the study, particularly the results of the online questionnaire, can be applied to other Lead Local Flood Authorities across England. The Halcrow team is currently discussing with the Environment Agency the potential to undertake a similar questionnaire for all Local Authorities to further analyse this.

With the announcement of the Comprehensive Spending Review, it is evident that there will be cuts to budgets within local authorities, which will be a significant challenge for them as they seek to implement their new legislative responsibilities. This study has concluded that some form of collaborative working between the Greater Manchester authorities is the most efficient and cost effective method for delivering the new responsibilities and developing the necessary capacity and capability. The ability to move towards this model will depend on the funds being available to implement the changes, and the necessary skills and resources being available to operate the new operational model.

## **Relevant Websites**

- AGMA: [www.agma.gov.uk](http://www.agma.gov.uk)
- Defra – Flood Risk Regulations (2009): [www.defra.gov.uk/environment/flooding/policy/2009directive.htm](http://www.defra.gov.uk/environment/flooding/policy/2009directive.htm)
- Defra – Floods & Water Management Act: [www.defra.gov.uk/environment/flooding/policy/fwmb](http://www.defra.gov.uk/environment/flooding/policy/fwmb)
- European Commission – Flood Risk Regulations: [www.ec.europa.eu/environment/water/flood\\_risk/index.htm](http://www.ec.europa.eu/environment/water/flood_risk/index.htm)
- The Flood Risk Regulations (Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks): [www.eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32007L0060:EN:NOT](http://www.eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32007L0060:EN:NOT)
- The Floods & Water Management Act 2010: [www.legislation.gov.uk/ukpga/2010/29/contents#](http://www.legislation.gov.uk/ukpga/2010/29/contents#)
- Halcrow Group Ltd: [www.halcrow.com](http://www.halcrow.com)
- IBM: <http://www.ibm.com/uk/en/>