

ENVIRONMENT OVERVIEW & SCRUTINY COMMITTEE

Date of Meeting	Tuesday 12 December, 2017
Report Subject	Mold Flood Alleviation Scheme – Review of Options Feasibility
Cabinet Member	Cabinet Member for Planning and Public Protection
Report Author	Chief Officer (Planning & Environment)
Type of Report	Operational

EXECUTIVE SUMMARY

Welsh Government requested information to be submitted by October 2017 from all Lead Local Flood Authorities (LLFAs) describing any Flood and Coastal Risk Management (FCERM) capital works that are being considered for progression within the next five year period. This has enabled Welsh Government to develop its 'five year pipeline programme of FCERM schemes'. This pipeline includes schemes led by both local authorities and Natural Resources Wales (NRW), and allows the alignment of Welsh Government funding to these priority schemes.

This report updates Members on one of these important projects, highlighting recent work led by the Council's Flood and Coastal Erosion Risk Management (FCERM) Team relating to a review of feasible options for designing and delivering a Mold Flood Alleviation Scheme.

RECOMMENDATIONS

1	That the individual opportunities identified in the Waterco Feasibility Study for 'smart flood management' in Mold are progressed to 'Project Appraisal Report' stage so that initial options identified are progressed and tested further in terms of their economic viability and therefore future deliverability through Welsh Government's pipeline programme.
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REPORT DETAILS

1.00	UPDATE OF THE MOLD FLOOD ALLEVIATION SCHEME
1.01	<p>In May 2017, Welsh Government wrote to all Lead Local Flood Authorities (Appendix A) outlining changes to their long term capital settlement and the need to establish a national pipeline of Flood and Coastal Erosion Risk Management (FCERM) schemes to take forward as part of their flood programme. A newly established FCERM programme board will now assist Welsh Government to consider and prioritise all schemes from both local authorities and NRW.</p>
1.02	<p>This new structured approach will promote transparency and consistency and allow Welsh Government and Local Authorities to better plan schemes over multiple years and assist in making the case for future settlement rounds. In conjunction with the new arrangements Welsh Government will be shortly releasing their revised project appraisal guidance for FCERM schemes based primarily on the 'Five Case Model'.</p>
1.03	<p>All Lead Local Flood Authorities were requested to submit to Welsh Government details of all schemes (over £100k) being considered over the next five years. Schemes at Project Appraisal (PAR), Design or Construction stages are eligible for application for grant funding of up to 85%.</p>
1.04	<p>The benefits of contributing to the Welsh Government pipeline of projects are that flood risk improvements in Flintshire can potentially be delivered with the support of grant funding opportunities, which in turn illustrates the need for preparedness and forward planning of projects to be able to access those funding opportunities.</p> <p>Appendix B provides a useful overview of the stages of standard FCERM capital projects and the typical resource, funding and timing arrangements.</p> <p>It should be noted that Welsh Government's five year pipeline programme applies only to large scale works. Other related programmes are available such as the 'Small Scale Flood Risk Management Grant'. Appendix C provides a short summary of the present funding options available for FCERM capital works.</p>
1.05	<p>One of these principal schemes relates to Mold Flood Alleviation where the FCERM Team has recently commissioned a review of the previous scheme design and feasibility work. The previous scheme, designed and developed on behalf of the local authority by Ymgynghoriaeth Gwynedd Consultancy (YGC), consisted of a culverted bypass channel to the west of Mold and large underground attenuation tanks at Ysgol Glanrafon. A cost review indicated construction budgets would be in excess of £12m, making this scheme economically unfeasible and unaffordable. The design carries additional risks in relation to legal, environmental, technical, and maintenance aspects of the proposal.</p>

1.06	<p>Waterco Consultants were therefore commissioned in late 2016 to undertake the task of building upon the previous scheme information and exploring alternative options to deliver flood risk mitigation in Mold. This feasibility study was asked to take account the effectiveness, affordability and reliability of the approaches identified.</p> <p>A copy of the Waterco Consultant’s study: <i>‘Mold Flood Alleviation – Smart Flood Management’</i> is provided in Appendix D.</p> <p>In summary the study identifies the following key opportunities:</p> <ul style="list-style-type: none"> • Infrastructure improvements through Mold (pages 9-13) • Upstream catchment attenuation (pages 14-15) • Cae Bracty resilience measures (page 20) • Catchment diversions (pages 22-23)
1.09	<p>The ‘Smart Flood Management’ – Opportunity Maps on pages 33 and 34 provides a useful visual overview of each of the opportunities identified.</p>
1.10	<p>This report recommends that the options identified for Mold in the Waterco study are progressed to the next stage of Project Appraisal (PAR) to further test their economic cases and potential deliverability.</p> <p>In order to maximise the potential deliverability of the components of the scheme, it is proposed to that each opportunity be assessed as a standalone smaller scheme and also as part of a suite of phased schemes in accordance with the new national project appraisal guidance. This will conclude where viable business cases exist, and support grant applications if progressed to detailed design and/or construction stages through Welsh Government’s ‘pipeline programme’.</p> <p>This approach offers some advantages over the previous larger scheme, as the potential for longer-term phased delivery of works may be more deliverable and achievable within budgetary and resource constraints.</p>

2.00	RESOURCE IMPLICATIONS
2.01	<p>Personnel: The capacity of most local authorities to deliver large flood infrastructure schemes has diminished in recent years through a combination of budget pressures and a decreasing technical staff resource. For Flintshire Council to deliver successful FCERM projects requires adapting to the role of ‘informed client’, using a smaller pool of internal technical staff to procure external expertise and resources as is necessary for each individual project.</p> <p>Measures are already underway to modernise the Council’s approach to flood risk management, including implementing an asset management database (AMX) to record and manage all local flood and drainage infrastructure, flood history, etc. This is a statutory requirement under the Flood and Water Management Act 2010. Such improvements are essential</p>

	to ensure the Council can support ongoing and future grant applications with robust evidence and standardised data consistent with Welsh Government requirements.
2.02	<p>Financial: As outlined in Appendix C, the majority (75-85%) of FCERM capital works costs for PAR, Design and Construction stages is funded through Welsh Government grant funding, with a local authority contributing the balance through its capital budget. These favourable rates allow Lead Local Flood Authorities to deliver schemes and improve local infrastructure that may otherwise be unaffordable through the Council's core capital budget. Notwithstanding the above, a 15% contribution rate may still present a significant demand on core capital budgets, particularly on larger schemes. Therefore individual bids and business cases will need to be made in line with the Council's approval process i.e. Asset Programme Board approval, Cabinet approval and Full Council approval.</p> <p>Developing and maintaining a transparent and robust programme of local FCERM projects is critical to ensure that Flintshire avails of ongoing and future FCERM grant funding to deliver local improvements where needs arise.</p>

3.00	CONSULTATIONS REQUIRED / CARRIED OUT
3.01	Not applicable.

4.00	RISK MANAGEMENT
4.01	As noted in Welsh Governments letter (Appendix A): <i>“By not including schemes to us by the end of September deadline you risk not being able to progress schemes at a later date as the programme up to March 2021 will be published in late Autumn”</i>

5.00	APPENDICES
5.01	A: Letter from Welsh Government of 17 th May 2017: <i>Development of a pipeline of Flood and Coastal Erosion Risk Management schemes.</i>
5.02	B: An Overview of the Typical Stages of FCERM Capital Projects.
5.03	C: Current Funding Options Available for Flood and Coastal Erosion Risk Management Capital Works
5.04	D: 'Mold Flood Alleviation – Smart Flood Management – Feasibility Study Report and Opportunity Map'

6.00	LIST OF ACCESSIBLE BACKGROUND DOCUMENTS
6.01	<p>Contact Officer: Ruairi Barry (Project Engineer FCERM) Telephone: 01352 704707 E-mail: Ruairi.Barry@Flintshire.gov.uk</p>

7.00	GLOSSARY OF TERMS
7.01	<p>FCERM Programme – A nationally based Welsh Government funded programme for identifying priority schemes to address flooding issues, prioritised on the basis of risk to life.</p> <p>Lead Local Flood Authority – Flintshire County Council is a Lead Local Flood Authority (LLFA) and has powers and duties for managing flooding from local sources.</p> <p>NRW – Natural Resources Wales</p> <p>Feasibility Study – An initial assessment of the flooding issues that require mitigation and a scoping of the opportunities and options to develop a solution.</p> <p>Project Appraisal Report – A more detailed case for proceeding with a project or proposal, involving comparing various options, using economic appraisal.</p>