



AGENDA ITEM:

COUNCIL: 14 December 2011

Report of: Assistant Director Community Services

Relevant Managing Director: Managing Director (People and Places)

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SUBJECT: ALT CROSSENS: DRAFT FLOOD RISK MANAGEMENT STRATEGIC PLAN – INITIAL CONSULTATION

Wards affected: Borough wide

1.0 PURPOSE OF THE REPORT

1.1 To advise of receipt of the “Lower Alt with Crossens Pumped Drainage Catchment: Draft Flood Risk Management Strategic Plan: Consultation Document” (the Consultation Document) and provide an overview of its key issues and potential implications for West Lancashire, which will be incorporated in the Council’s formal response to the Environment Agency.

2.0 RECOMMENDATIONS

2.1 That the key issues and potential implications for West Lancashire contained within the Consultation Document be noted.

2.2 That the Assistant Director Community Services, in consultation with the Leader and Portfolio Holder for Planning and Technical Services, be given delegated authority to respond to the Consultation Document, covering the issues outlined in paragraph 6 of this report and any others which may arise.

2.3 That the Assistant Director Community Services continues to engage with the Environment Agency and other strategic partners regarding the Lower Alt with Crossens Pumped Drainage Catchment: Draft Flood Risk Management Strategic Plan.

3.0 BACKGROUND

3.1 The Lower Alt with Crossens Pumped Drainage Catchment: Draft Flood Risk Management Strategic Plan covers large areas which are in both West

Lancashire and Sefton. As such, reference is made at times to areas which although not in West Lancashire have a significant impact on the catchment as a whole, particularly in relation to the Altmouth pumping station.

3.2 The Lower Alt with Crossens Pumped Drainage Catchment: Draft Flood Risk Management Strategic Plan: Consultation Document has been prepared by the Environment Agency. West Lancashire Borough Council is represented on a Steering Group in relation to the preparation of the strategic plan. The Consultation Document looks at long term sustainable flood risk management and land drainage for the Lower Alt with Crossens Pumped Drainage Catchment. The primary and secondary study area covers much of West Lancashire (see Appendix 1) comprising:-

- The Crossens (pumped) catchment - a large mainly rural, agricultural area, in West Lancashire with parts within Sefton consisting of Southport and land to the south and east of Southport.
- The lower part of the Alt catchment covers a large mainly rural, agricultural area, in West Lancashire, and within Sefton downstream of Maghull - a large rural, agricultural area covering, Maghull, Lydiate, Hightown, Formby, Ince Blundell, Lunt, Sefton Village and Little Altcar, the fringes of Crosby, Thornton and Aintree;

The whole area is covered by the Alt Crossens Catchment Flood Management Plan (CFMP).

3.3 Initially there was a 12 week consultation period for the Consultation Document, running until 16 December 2011. A presentation was given to Members by the Environment Agency on 17 November 2011, at which Members expressed concern over some of the contents of the document and also in relation to the short consultation period. A request was subsequently made to the Environment Agency to extend the official deadline for receipt of comments and this request was granted, with the new consultation closing date now being 31 January 2012.

3.4 A number of issues raised within the Consultation Document will have a significant impact for West Lancashire and will need further consideration prior to the submission of a formal Council response to the Environment Agency. The Environment Agency has advised that this consultation period is part of a longer dialogue over future flood risk management in this area, until spring 2013, before major changes are fully implemented from 2015. There will be a need for on-going debate and close liaison with the EA to ensure that consideration of all relevant factors are recognised.

4.0 CONSULTATION DOCUMENT OVERVIEW

4.1 The Lower Alt and Crossens catchment covers a large geographical area within West Lancashire and Sefton and has a complex water management regime. The Environment Agency is currently one of the main managers of the water levels in the catchment. Some of this work is necessary to maintain acceptable levels of flood risk to the urban community.

4.2 For historical reasons, however, a large proportion of the Agency's activity and expenditure is on rural flood risk management and land drainage in the Lower Alt

and Crossens catchment; through a network of main rivers and drainage channels, two main pumping stations at Crossens and Altmouth and 11 smaller, satellite pumping stations. The maintenance and operational costs for the Environment Agency are about £3m per year.

4.3 The area is low lying, and relies heavily on pumping (rather than gravity) to manage water levels, flood risk and drain the area. According to the Consultation Document, much of the agricultural land in West Lancashire is valuable (high quality), and is particularly sensitive to how water levels are managed with large areas being generally lower than sea level. Much of this agricultural land is drained peat. Generally the adjacent urban areas in Sefton are on higher ground compared to the rural areas inland of them, and as such are at less risk of flooding.

4.4 The Consultation Document indicates that this Environment Agency management regime currently provides:-

- Tidal flood defences (mostly from the tidal gates at the Crossens and Altmouth Pumping Stations, and raised embankments along the River Alt and Downholland Brook). Without these some 20,000 properties and some 10,000 hectares of agricultural land within the catchment would be at very high risk of tidal flooding across the whole study area in West Lancashire and Sefton.
- Urban river flood risk management. This is mostly from the Crossens and Altmouth Pumping Stations, and particularly affects Banks Village in West Lancashire and Formby/parts of Southport. The Environment Agency comment that river flooding in the urban environment is not a major concern in the Lower Alt catchment, and is limited and generally well managed in the Lower Alt and Crossens catchments.
- Rural river flood risk management. The current system offers a high standard of protection for the agricultural land in the Lower Alt and Crossens catchment. This is above normal standards for agricultural land nationally – up to a 1% annual probability in some parts of the Lower Alt catchment, compared to a 4% to 10% annual probability of flooding, nationally. This is because the high river embankments and pumping stations protect the agricultural land, which is the natural floodplain, from flooding. Elsewhere in England and Wales, agricultural areas still act as floodplains – that is, they form ‘washlands’ and natural flood water storage areas.
- Urban surface water flood risk management. The Crossens and Altmouth Pumping Stations play a limited role, by pumping water out of key main rivers and so allowing other watercourses and the surface water flowing into them to drain more quickly.
- Rural land drainage. The Environment Agency maintains extensive land drainage assets, including pumping stations and a network of drains that carry water to them. Land users also maintain their own ditches and in field land drainage systems. The Environment Agency’s satellite pumping stations provide a land drainage function by lifting water from low lying agricultural areas into the higher drains, which in turn drain to the main pumping stations.

4.5 The Environment Agency consider that the current means of flood risk management in the Lower Alt and Crossens catchments is not sustainable. The Consultation Document states that an alternative, more sustainable approach to flood risk management would include:-

- A reduction in capacity or closing down of some pumping stations, including a potential reduction in capacity at the Altmouth and Crossens Pumping Stations.
- An increased use of the natural flood plain in rural areas - including agricultural land – as washlands and for flood storage. This includes for example a more permanent basis for the washland at Lunt Meadows. Since the July 2010 breach of the embankment, which has been reinstated to a lower height, Lunt Meadows has reduced both flood risk from Dovers Brook in Maghull, and downstream water levels in the River Alt and Downholland Brook, thus making it easier for other watercourses to drain into them.

4.6 The Environment Agency's main reason for proposing change to the flood risk management and land drainage regime in the study area is financial. Current and proposed changes to DEFRA funding rules mean that it will not be possible for them to continue to fund the rural land drainage to the same extent as at present. This together with rural flood risk management, accounts for most of their activity and expenditure. A very significant contribution from others would be needed if the current regime is to be sustained.

4.7 Other pressures for change include:-

- Flood and Coastal Erosion Resilience Partnership Funding – DEFRA funding allocations to flood and coastal erosion risk management projects is changing. Future funding will relate directly to the number of households protected, damages prevented, plus the other benefits. If full funding is not available, projects can still go ahead if costs can be reduced or if other funding can be found to meet the remainder.
- Asset Management - within this context the Environment Agency need to make longer term investment decisions about the two main pumping stations (Altmouth and Crossens), as well as short and medium term decisions regarding the refurbishment, replacement or abandonment of satellite pumping stations and other assets such as the many raised embankments.
- Climate change – which includes predicted wetter winters and drier summers, but with greater rainfall intensity. The latter could gradually weaken embankments and increase the risk of their failure or breach. Drier summers could put increasing pressure on water resources.
- Peat wastage and associated carbon emissions - the Consultation Document indicates an average wastage/shrinkage of 1.6cm per year, based on past surveys. The main area of peat in Sefton is around Lunt; there is a more extensive problem in West Lancashire. This drained peat emits carbon, reported as being 20 tonnes per hectare per year, compared to 0.1 tonnes/ha/year for fuel for the pumping stations. Such emissions contribute to climate change.

- Capacity and performance - there are capacity variations between satellite pumping stations, including possible insufficient capacity at some. A number of these stations will require significant investment in the near future if they are to continue to provide effective land drainage services. Channel siltation and reduced channel capacity reduces performance of the system.
- Drainage impairment – reductions in ground levels reduce the effectiveness of pumping to adequately drain the land. Drainage impairment is evident in a number of locations within the study area, and is expected to continue.
- Ecology – there could be ecological benefits from a change in the rural land drainage regime.

5.0 CONSULTATION DOCUMENT DRAFT RECOMMENDATIONS

5.1 The draft recommendations contained within the consultation document are as follows:-

A) **Maintain Tidal Defences**

With others, the Environment Agency will continue to maintain tidal defences where economically, technically and environmentally appropriate to do so.

B) **The Environment Agency will continue to invest in fluvial flood risk management in areas where it is economically, technically and environmentally appropriate to do so. This will include:-**

- reducing the amount of pumping by investigating other flood risk management options such as increased flood storage
- Carry out an appraisal study of potential flood storage areas
- exploring the potential for further habitat creation
- Exploring other ways to reduce costs and / or generate other funding.

Priority areas for these activities:-

Formby
 Maghull
 Banks
 Lunt Meadows Washlands
 Embankment Crest Height Review
 Study Area wide Peat Level Survey
 Downholland Embankment Repairs (Left Bank)
 Sluice embankment remedial works & other embankment re-profiling?
 The Sluice / Back Drain Embankment Remedial works
 Moss Lane Siphon Relining.

C) **By Spring 2015 the Environment Agency will make a significant change from current practice, by either reducing or stopping Land Drainage work within the catchment. To implement this major change the Environment Agency will:-**

- i. Launch a Debating Period with the local and farming communities until Spring 2013, focussed on the best way forward for land management and subject to Government policy.
- ii. Implement a Transition Period whereby we will continue to undertake land drainage activities with the reducing level of funding allocation until Spring 2015.
- iii. Implement the outcomes discussed and agreed / accepted from Spring 2013 to Spring 2015. We anticipate that in the first 18 months this will be to debate and determine the best way forward within the Lower Alt and Crossens catchment and a further 2 years to implement any agreed actions.
- iv. Continue to undertake land drainage where legally required to do so
- v. maintain existing pumping stations to a working and safe standard.
- vi. Establish a River Alt with Crossens Pumped Drainage Catchment Care Officer to assist and provide some support to stakeholders through the Transition Period. The Environment Agency will investigate funding opportunities to carry out a survey of the Peat Levels to provide information to support possible land management and land drainage changes.

6.0 INITIAL COMMENTS FOR CONSIDERATION

- 6.1 At this initial stage the Environment Agency is looking to identify areas of concern which affected residents, businesses and stakeholders may have over the draft recommendations within the Consultation Document.
- 6.2 The Consultation Document makes clear that the Environment Agency cannot, and will not, continue to fund rural land drainage after 2015 in the same way. Also, it makes clear that the Environment Agency would want to alter the river flood risk management regime, notably by reducing the amount of pumping by investigating other flood risk management options, especially for the urban area, such as increased flood storage on agricultural land within the natural floodplains.
- 6.3 The contents and potential future impact for the West Lancashire Borough, as contained in the Consultation Document recommendations, are potentially extensive and far reaching and if taken forward would have serious implications for land drainage in the area. This would impact adversely on the local and farming communities within the Borough.
- 6.4 No hydraulic modelling has been carried out to accompany the Consultation Document which would identify the areas affected by future flooding. A computer generated hydraulic analysis should be provided to demonstrate how the catchment is affected by modelling the various rainfall events for each of the draft recommendations. This model should also determine extents and depths of flooding which are likely to occur.
- 6.5 The Consultation Document suggests that a palette of options is possible and this needs expanding on further to help identify the effect on land drainage in the area in taking forward the various options either individually or combined.

6.6 At this stage, therefore, there is clearly not enough information contained within the Consultation Document to identify the full impact of any proposed changes in the land drainage regime for West Lancashire on the following:-

- the drainage infrastructure within the area
- the affected local residents and communities
- the farming and local business communities
- future planning policy and development proposals for the affected areas.

6.7 We would therefore request that the Environment Agency identify clearly, as a matter of urgency, the full details and impact of any proposed changes on the existing land drainage infrastructure in the area. This should be supported by robust hydraulic computer modelling of these proposals, which will then help both Members and Officers have a better understanding of the effect of the proposals on the West Lancashire community.

6.8 This Council urges that no decisions are made by the Environment Agency in relation to changes to the land drainage infrastructure within the Alt Crossens catchment until all relevant details have been fully taken into consideration and the consultation process has been satisfactorily concluded.

6.9 The more detailed implications of the proposals in the Consultation Document are unlikely to become apparent in this initial consultation period, but will no doubt become clearer as discussions continue into 2012 and beyond. Further reports on this issue will be brought to members at the appropriate time.

7.0 FINANCIAL AND RESOURCE IMPLICATIONS

7.1 There are no immediate financial implications arising directly from this report, however, the Consultation Document includes recommendations which could, potentially, have future resource implications for the Council. The extent of these implications will not be known for some time yet. These will be reported to Members in due course as an understanding of the proposed strategy becomes clearer.

8.0 SUSTAINABILITY IMPLICATIONS/COMMUNITY STRATEGY

8.1 The Council must ensure that any future changes to the existing land drainage regime within West Lancashire provides a long-term sustainable solution to meet and protect the needs of both the local and business communities within the Borough.

9.0 RISK ASSESSMENT

9.1 The taking forward of the draft recommendations in the Consultation Document presents a risk to both the flood risk management and the local economy in West Lancashire.

10.0 CONCLUSIONS

10.1 Although the document does not actually state that the Environment Agency is going to “switch off the pumps and flood the catchment” there is a

recommendation that the existing pumping regime is reduced and that by Spring 2015 the Environment Agency:

“.....will make a significant change from current practice, by either reducing or stopping Land Drainage work within the catchment....”

The full effect or extent of this is unknown at the moment and this “unknown”, quite rightly, raises serious concerns within the local community.

Background Documents

Lower Alt with Crossens Pumped Drainage Catchment: Draft Flood Risk Management Strategic Plan: Consultation Document, 2011 [https://consult.environment-agency.gov.uk/portal/re/nw/flood/alt/lower alt and crossens consultation](https://consult.environment-agency.gov.uk/portal/re/nw/flood/alt/lower_alt_and_crossens_consultation)

Alt Crossens Catchment Flood Management Plan (Summary Report), 2009
http://www.environment-agency.gov.uk/static/documents/Alt_Crossens_CFMP.pdf

Equality Impact Assessment

The decision does have an impact on members of the public, employees, elected Members and stakeholders and the extent of the impact will be considered as part of the full consultation process.

Appendices

1. Lower Alt with Crossens Study Area