

**Open Report on behalf of Richard Wills, Executive Director for Environment and Economy**

Report to:	<b>Executive</b>
Date:	<b>03 February 2015</b>
Subject:	<b>Boston Barrier Water Level Management</b>
Decision Reference:	
Key decision?	<b>No</b>

**Summary:**

The Boston Barrier secured funding via a decision by the Executive on 3rd April 2012. Having committed to £11m of funding the Boston Barrier's project programme has reached the stage where this Authority has to make decisions on how its economic development funding contribution of £11m will be spent. As a result of consultations with a wide range of stakeholders and ongoing development of the barrier's design and specification our detailed understanding of the opportunities and constraints that the project will open up has grown and new possibilities to deliver economic benefits to Boston have emerged. These could serve stakeholders and the wider community better and bring forward the realisation of improved economic outcomes for the town. An updated economic study has been completed to inform the Council of the costs, benefits and timescales of each option and the economic benefits they will generate. This report is to enable the Council to make informed decisions and identify their preferred development options to deliver best value for Boston. Project partners at the Environment Agency and Boston Borough Council are supportive of the recommendation's in this report.

**Recommendation(s):**

That the Executive:-

1. approve the development of a Waterspace Strategy for Boston to capture the opportunities the barrier, Water Level Management ("WLM") and Fens Waterways Link ("FWL") bring to Boston in a single document that embeds the concepts into local and regional Spatial Plans. This would include the feasibility work required to deliver WLM at the level of the River Witham at Grand Sluice.
2. approve working towards the Floating Haven vision implementing WLM as part of the phased development of FWL when a delivery mechanism has been identified by central government.

3. approve working in partnership with the Canals and Rivers Trust to upgrade Grand Sluice lock

4. approve working in partnership with the Port of Boston to mitigate for the loss of river frontage due to the siting of the barrier by widening the wet dock entrance and providing moorings downstream of the barrier initially for marine leisure and commercial boats and in the longer term for the relocation of the fishing fleet when WLM is delivered.

5. receive future reports seeking approval for the Boston Waterspace Strategy and other infrastructure improvements to attract tourists and visitors to the town.

6. approve the development of the case for FWL and the Floating Haven vision and present the business case to central government to support those projects identifying delivery mechanisms, funding and timescales.

7. delegate to the Executive Director for Environment and Economy the taking of all decisions and the entering into of all legal documentation necessary to give effect to the above decisions.

**Alternatives Considered:**

1. Deliver WLM as part of the Boston Barrier project, however economic benefits will be held back until FWL is delivered and costs have escalated to £2.6m above the LCC contribution. The delivery of WLM as part of the Boston Barrier scheme brings additional risks too as existing user groups are minded to object to the proposal unless a lock is constructed beside the barrier further escalating costs by an estimated £6m. The EA cannot contribute to these costs as their funding is specifically targeted to protect existing homes and businesses not for betterment or to promote economic growth so it would be left to this Authority and other stakeholders to underwrite those costs.

**Reasons for Recommendation:**

The staged approach represents best value by assuring and bringing forward economic benefits whilst the design of the barrier and the adjoining infrastructure will incorporate provision for future delivery of WLM. At levels deliverable as part of the Boston Barrier project WLM will not create mooring opportunities in the Boston Haven without delaying the project by up to two years and will use all (and possibly more than) the available £11m funding. Using the funding to improve conditions for navigation and provide mooring opportunities at other locations now will bring forward the realisation of economic benefits to Boston and provide the opportunity to build towards the "Floating Haven" vision which would begin an exciting new future for Boston.

**1. Background**

The Boston Barrier is being developed as a Combined Strategy (CS) to Deliver increased flood protection and wider economic benefits to Boston and the surrounding area. The CS proposal is to use the barrier to impound water in Boston as the tide goes out to provide stable water between Grand Sluice and the Boston Barrier (sited at the Port of Boston) and to provide mooring opportunities and ideal navigation conditions for inland waterways boaters, this being known as Water Level Management (WLM). This non-tidal link between the River Witham and the Black Sluice will complete phase 3 of the Fens Waterways Link (FWL), Europe's biggest inland waterways regeneration project that will link Lincoln, Peterborough, Cambridge and Ely. As a result of widespread consultations our detailed understanding of the positive impacts and challenges to access through the Haven WLM has grown and new opportunities have emerged that could serve Boston better and bring forward the realisation of improved economic outcomes for the town.

Earlier appraisals of the business case (both internal and external) and reports to Council assumed higher levels of impoundment would be deliverable within the Barrier programme. However as the project has developed it has emerged that the engineering works required would delay the programme by up to two years.

It therefore became necessary to review project outputs so that options were appraised and Richard Glen Associates (RGA), a specialist in this area were contracted to carry this out. The RGA report informs the decision making process as the Boston Barrier project reaches the stage where this Authority has to review it's interpretation of the Combined Strategy and determine the order in which investments will be made to deliver best value for Boston.

The RGA report identifies the costs, economic benefits and timescales over which infrastructure improvements will impact. Whilst new options have emerged the core elements that bring about the benefits to Boston remain the same:

1. increased flood protection creating higher levels of confidence from private sector investors in the domestic and commercial property markets.
2. tourist and Visitor sectors; improved conditions for boaters wishing to navigate through Boston both along the inland waterways network (the Fens Waterways Link) and to and from the Wash. There is also the opportunity to develop the barrier as a destination with a viewing platform and Waterways Heritage Centre in the Black Sluice Pumping Station.
3. the opportunity for retail and service businesses and residential developers to focus on the new market place that would be created if water levels in the town are permanently raised to provide a more attractive and busier water frontage.

This project has been developed over approximately ten years and during that time a number of constraints have been identified which have the overall impact of limiting the levels and duration at which WLM can be operated as part of the Barrier project. In particular consultation with stakeholder groups and the wider community including newsletters, open meetings and workshops have informed us that:

1. The highest theoretical level at which water could be impounded would be to equal the level in the River Witham upstream of Grand Sluice, however that level is inconsistent both seasonally and on a day to day basis. Other water courses that flow into the Haven are managed at lower levels. Whilst there are engineering solutions to these challenges they cannot be implemented within the project programme without significant delays and the costs would also exceed the available funding. The highest deliverable level of impoundment within the Boston Barrier programme is therefore 0.0m AOD (in the middle of the tidal cycle) and will not accommodate town centre moorings in the tidal Haven without continual dredging on a permanent basis or until higher levels of WLM can be achieved.
2. As part of the Barrier project WLM management at 0.0m AOD would be further limited too. There are two tidal cycles per day and only one of these, during the daylight hours would be impounded. The other would be left so that the Haven would drain naturally and this means that boats could not moor up in the Haven overnight as water levels would be too low. The impoundment would be seasonal, operated throughout the inland waterways boating season (Easter to October)..
3. The key to unlocking the economic benefits from Boston's waterways is the provision of safe reliable overnight moorings. These can be on line (on the rivers and drains) or off line in conventional marina's. There is capacity to increase the number of on line moorings at Grand Sluice and on the Black Sluice Drain but this is limited. One planning application for an off line marina development has been approved just upstream of Grand Sluice with a second proposed adjacent to the Black Sluice, however the demand for these is linked to the implementation of WLM and the development of FWL. Consultation with the landowners/developers has revealed a reluctance to start developing those facilities ahead of the delivery of FWL phases 4 and 5 which extend navigation beyond the Black Sluice at Donington to connect with the River Glen and the Welland at Spalding.

The RGA report points out that these factors will delay increases in boating activity and therefore the economic benefits cannot follow until a WLM strategy of impounding water at the level of the River Witham can be adopted and made consistent and reliable. This creates a context in which this Authority's decisions on spending have to be made:

- A. The currently deliverable levels, frequency and seasonality of WLM in the Haven are restricted and would not provide reliable permanent deep water moorings in Boston town centre.
- B. The business case supporting the development of the Fens Waterways Link (FWL) remains robust however there is no focussed delivery mechanism or funding in place. The next phase of FWL; The Donington to Surfleet Link will connect the Black Sluice and the River Glen and current cost estimates for this are £40m to £60 m.
- C. The economic benefits from increased boating activity from the inland waterways will not be fully realised until FWL is in delivery.
- D. The RGA report has identified unmet demand for an east coast destination for leisure marine boats from the North Sea and Baltic ports as well as from other UK locations. Boston could meet this demand and the RGA report highlights this as a significant new opportunity.
- E. Existing use of the Haven by leisure boats, the fishing fleet and other commercial craft could be impacted negatively by WLM and this could result in objections to the current preferred WLM option triggering a public inquiry and programme delays. Leisure boaters backed by the Royal Yachting Association wish to see a lock alongside the Barrier incorporated into the project before Water Level Management is introduced.
- F. An additional option to WLM that improves the window for navigation for all boaters has been identified through consultation with stakeholders. This would be to upgrade the lock at Grand Sluice to accommodate longer boats (it is currently restricted to approximately 45 feet when canal boats can be up to approximately 70 feet long). The lock gates could also be upgraded to enable the lock to be used at all stages of the tidal range, the current arrangement limits the lock to operate only when the level in the River Witham is higher than in the tidal Haven. This would increase the window of opportunity for all boats to pass through the Haven without having to implement WLM until the delivery of FWL has been secured. This would also create the opportunity to deliver additional on line moorings (on the River Witham, the Black Sluice and in the Haven at the Port of Boston and other local infrastructure improvements without exceeding the available funding.

The RGA report identifies the best possible outcome for Boston would be operating WLM permanently at the level of the River Witham with reliable deep water moorings at several locations in the Haven through the town centre. They have described this as a "Floating Haven" vision similar to that recently developed in Bristol. This would provide opportunities for temporary moorings for visiting boats from our inland waterways and the sea and permanent moorings for resident boats both on line and off at marina's on the Black Sluice, the River Witham and in tidal waters at the Port or downstream of it.

Two delivery options have therefore been identified:

1. To deliver WLM as part of the Boston Barrier project for implementation in April 2020 (the start of the first boating season after the barrier is in use).
2. To deliver alternative infrastructure improvements ahead of WLM and the further development of FWL.

### **Option 1 cost components:**

- Barrier by-pass channel and fish pass
- Fishing Fleet Quay facilities
- Works to wet dock entrance (Port of Boston)
- Relocate fishing fleet
- Other river frontage works to the port estate
- Consents and permissions, management fees etc.

### **Total cost to deliver WLM at 0.0m AOD £13.6m.**

Additional costs for a lock at the barrier to meet existing user group expectations are not included. If user groups, supported by the Royal Yachting Association mounted a successful challenge the cost would be £6m.

Further costs to increase WLM to level with the River Witham (+0.8m AOD to +1.35m AOD) currently estimated at £10m to divert the Black Sluice outfall below the barrier.

An additional element of risk is that the project delivery programme has little flexibility if WLM is delivered as part of the Barrier project and is included in the Transport and Works Act Order process that gives consent for the project to be undertaken.

### **Option 2 cost components:**

- Fishing fleet quay facilities
- Works to wet dock entrance (PoB)
- Relocate fishing fleet (in part)
- Waterspace Strategy for Boston (including feasibility study on permanent high level WLM)
- Grand Sluice Lock upgrade (costs shared with the Canals and Rivers Trust)
- Other infrastructure improvements as prioritised by the Boston Waterspace Study and Feasibility Report.

### **Total cost to LCC capped at £11m (but additional funding could be attracted from external sources such as ERDF to increase this).**

Some option 1 costs would remain applicable. The relocation of the fishing fleet would be delayed until WLM was implemented but the Ports loss of frontage due to the barriers location would still require mitigation and the works at the wet dock entrance would provide this. The fishing fleet quay facilities could then be used to establish visitor moorings for marine leisure boats in the short term.

Again these costs do not include the provision of the additional infrastructure required to deliver WLM at the level of the River Witham at Grand Sluice. In both cases a lock would be required alongside the barrier and a bypass culvert to divert the Black Sluice outfall to a point downstream of the barrier. The lock has been estimated to cost £6m and the Black Sluice outfall bypass £10m. Local river users backed by the Royal Yachting Association have stated that they will oppose WLM at any level unless a lock is constructed alongside the barrier to protect their rights of passage as the Barrier could otherwise create an obstruction.

The County Council funding would be used to commission a Waterspace Strategy for Boston including a feasibility study for permanent WLM at the level of the River Witham. Additional options include the provision of on line moorings in the River Witham and the Black Sluice and create a Waterways Heritage Centre at Black Sluice Pumping Station to compliment the Barrier, Black Sluice Lock and the café and business space in Black Sluice Cottages subject to the recommendations coming out of the Boston Waterspace Strategy.

## **2. Conclusion**

Option 1 delivers WLM with a degree of certainty but also with significant compromises. Economic benefits won't be felt until further investment in infrastructure and a commitment to FWL have been realised. However the level, frequency and duration of impoundment would be reduced costs would also exceed the £11m committed to date by up to £2.6m and which this Authority would be expected to underwrite. Costs could escalate further if user groups were able to successfully argue their case for a lock bedside the Barrier (+£6m).

Option 2 widens the navigation window for all boats wishing to use the Haven and provides moorings for visiting boats nearby ahead of FWL and WLM. There are risks that WLM might not be implemented but as part of a phased approach economic benefits would be felt sooner and demand for WLM and facilities for visitors from the sea could be demonstrated and add to the business case for further development of FWL and the floating Haven vision. The Environment Agency have a "no regrets" policy to major infrastructure developments such as the Boston Barrier and this means that the facility will be designed and specified to enable future changes to implement WLM, provide space for a lock beside the barrier and will not prevent the installation of a by-pass for the natural discharge of the Black Sluice to a point downstream of the barrier. These measures will enable the "Floating Boston" vision to be realised when funding can be secured.

## ***Equality Act 2010***

The Council's duty under the Equality Act 2010 needs to be taken into account by the Executive when coming to a decision.

The Council must, in the exercise of its functions, have due regard to the need to:

- Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010;
- Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it: Equality Act 2010 section 149(1). The relevant protected characteristics are age; disability; gender reassignment; pregnancy and maternity; race; religion or belief; sex; sexual orientation: section 149(7).

Having due regard to the need to advance equality of opportunity involves having due regard, in particular, to the need to:

- Remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic;
- Take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it;
- Encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities.

Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to tackle prejudice, and promote understanding.

Compliance with the duties in this section may involve treating some persons more favourably than others.

A reference to conduct that is prohibited by or under this Act includes a reference to:

- (a) A breach of an equality clause or rule
- (b) A breach of a non-discrimination rule

It is important that the Executive is aware of the special duties the Council owes to persons who have a protected characteristic as the duty cannot be delegated and must be discharged by the Executive. The duty applies to all decisions taken by public bodies including policy decisions and decisions on individual cases and includes this decision.

To discharge the statutory duty the Executive must analyse all the relevant material with the specific statutory obligations in mind. If a risk of adverse impact is identified consideration must be given to measures to avoid that impact as part of the decision making process.

These requirements will be clearly stated in the procurement of contracts and/or partnership agreements that impact upon the specification, design, construction and accessibility of the services and facilities created. In all proposed works consultation will be undertaken as required to gain the necessary consents and permissions allowing any issues or comments to be raised to the consenting authority and to be addressed via that process.

### ***Child Poverty Strategy***

The Council is under a duty in the exercise of its functions to have regard to its Child Poverty Strategy. Child poverty is one of the key risk factors that can negatively influence a child's life chances. Children that live in poverty are at greater risk of social exclusion which, in turn, can lead to poor outcomes for the individual and for society as a whole.

In Lincolnshire we consider that poverty is not only a matter of having limited financial resources but that it is also about the ability of families to access the means of lifting themselves out of poverty and of having the aspiration to do so. The following four key strategic themes form the basis of Lincolnshire's Child Poverty strategy: Economic Poverty, Poverty of Access, Poverty of Aspiration and Best Use of Resources.

The Strategy has been taken into account in this instance and the following comments are made:

The outcomes of the £11m investment by this Authority are intended to increase economic activity and create new jobs in Boston and the surrounding area. Interventions such as this also increase opportunities indirectly as the additional spend is redistributed locally and as private sector confidence in underlying land and property values increase. The increases in economic activity and jobs will present new employment opportunities for all local residents.

### ***Joint Strategic Needs Assessment (JSNA)***

The proposal will support the themes of the JSNA in the following ways:

- **Age, Disability, Race and Gender:**
- The facilities and services created will be designed and specified to ensure equality of access
- Existing infrastructure upgraded will be designed and specified to ensure equality of access
- All facilities will be subject to consultation via planning and other relevant consents and permissions which will require a competent design and accessibility statement..All facilities will be required to meet current building regulations and subject to inspection by the consenting authority

## ***Health & Well Being Strategy***

The proposal supports the improving mental health and wellbeing themes of the Lincolnshire Health & Well Being Strategy

LCC's investment will be the catalyst to a more active, diverse and attractive river and frontage in Boston. This will encourage local residents as well as visitors and tourists to spend time outside watching the boats and walking alongside the Haven. It is well documented that outdoor activity raises peoples sense of wellbeing and can improve mental health.

Lifting the local economy and increasing levels of employment will increase job opportunities for local residents. This will impact positively upon levels of poverty and deprivation which are known contributors to inequality.

### **3. Legal Comments:**

The Executive has the power to adopt the recommendations for Lincolnshire County Council by virtue of Section 1 of the Localism Act 2011.

### **4. Resource Comments:**

The Council approved its current capital programme on 21<sup>st</sup> February 2014. Within this programme an allocation of £11m was made available for the Boston Barrier project. This report details the potential best use of this funding. A capital appraisal of the individual schemes will be presented for approval once this detail is determined.

## **5. Consultation**

### **a) Has Local Member Been Consulted?**

Yes

### **b) Has Executive Councillor Been Consulted?**

Yes

### **c) Scrutiny Comments**

n/a

### **d) Policy Proofing Actions Required**

N/A

## 6. Appendices

These are listed below and attached at the back of the report	
Appendix A	Economic Scrutiny report February 2012
Appendix B	Economic Scrutiny report February 2012
Appendix C	Economic Scrutiny report February 2012
Appendix D	Executive Report April 2012
Appendix E	Richard Glen Associates (RGA) Boston Barrier Economic Appraisal
Appendix F	RGA report extension: Before Water Level Management

## 7. Background Papers

The following background papers as defined in the Local Government Act 1972 were relied upon in the writing of this report.

Document title	Where the document can be viewed
Economic Scrutiny report February 2012	
Executive report April 2012	
RGA economic study report	
RGA report extension	

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