

Meeting: Harbour Committee

Date: 5 February 2019

Wards Affected: All

Report Title: Brixham Harbour Improvement Scheme

Is the decision a key decision? Yes

When does the decision need to be implemented? N/A

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1. Proposal and Introduction

1.1 Since the new Fish Market in Brixham was opened in 2011, both the quantity and value of fish and shell-fish product have increased. Brixham has effectively reached capacity in terms of vessels that it can accommodate, and cannot develop further without the installation of a northern breakwater arm to provide the essential environmental protection required. In addition, the forecast consequences of climate change will make the harbour less viable without the additional protection afforded by a northern arm breakwater. In tandem, the popularity of the recreational vessels' swinging moorings has substantially decreased while the costs of maintaining the aging mooring infrastructure has significantly increased.

1.2 Key project deliverables include:

- Installation of a northern arm breakwater connected to the land at Freshwater and extending to within 60m of the obsolete fuelling jetty on Victoria breakwater. This distance is considered a compromise between environmental protection and the necessity to allow vessels to safely enter and leave the harbour;
- Land reclamation between the north-western face of the Fish Quay and Oxen Cove to connect the two areas, this allowing the burgeoning commercial fishing industry to expand coherently by providing 3 new landing berths and the space to construct additional market, storage and administrative buildings; and
- Construction of a 350-berth walk-ashore pontoon system, connected to the shore in Freshwater. This will accommodate the 160 vessels currently on swinging moorings to the western side of the harbour and another 190 berths to deliver additional revenue to off-set the costs of this scheme.

1.3 The expected benefits of this scheme include:

- Up to 100 direct and 150 indirect new full-time employment opportunities;
- Up to £10m pa growth in the value of fish and £4m pa growth in the value of shell-fish landed at Brixham;
- Up to £14.28m Gross Value Added (£8.16m Net Value Added) into the Torbay;

- Three new landing berths, each capable of accommodating a beam trawler sized vessel; and
- The continued success of Brixham as a fishing port of strategic national value.

2. Reason for Proposal and associated financial commitments

- 2.1 Brixham's capacity to accommodate the commercial fishing industry has been reached both ashore and afloat. This is exacerbated by the operational loss of the more exposed (north-facing) Fish Quay berths during inclement weather which often make it dangerous to berth or unload vessels alongside. Similarly, the associated growth in storage and transport requirements have often led to lorries being loaded beyond the Fish Market gates and thus amongst the general public. This is a serious health and safety issue.
- 2.2 The lack of capacity not only hinders future growth but is also a threat to existing revenues: if new boats have to be turned away for the lack of berthing and unloading facilities there is a risk that existing vessels could also leave since they habitually work together.
- 2.3 Recreational harbour users are eschewing the current swinging mooring arrangements in preference for affordable 'walk ashore' pontoon berths. While demand for vessels berths undoubtedly exists the desirability of the current moorings in Brixham is declining. The financial consequences are compounded by the rise in maintenance costs to operate this aging infrastructure.
- 2.4 The proposals contained in this report will commit the Council financially to:

Item	Cost (Est)	Notes
Floating breakwater	£9m	Based on 400m breakwater (20x 20m units), and all chain/anchor fixings required
350 berth piled pontoon	£1.9m	160 existing berth-holders and 190 new berths
Fish Quay & Oxen Cove land reclamation	£2m	
Contingency	1m	
Total	£14m	

- 2.5 Grant funding will be sought, however in its absence the business case remains viable: a loan of £14m from the Public Works Loan Board requires an annual repayment of **£657,013** based on a 3.25% interest rate fixed for the first 25 years, capital and repayment, reducing to £544,838 for years 26-40 after the loan on the mooring pontoon is repaid.
- 2.6 Borrowing costs reduce by £45,028 pa for every £1m grant or other funding secured.

3. Recommendation(s) / Proposed Decision

- 3.1 That the Harbour Committee support the strategic direction presented by the Tor Bay Harbour Master and endorse the proposal to undertake capital works that will improve Brixham harbour.

- 3.2 That the Harbour Committee recommends to Council the strategic direction set out in the submitted report and that the Interim Director of Place be requested to prepare a business case for presentation to Council

Appendices

Appendix 1: Sketch of project deliverables

Appendix 2: Exempt Appendix

Background Documents

DEFRA's *South Inshore and South Offshore Marine Plan*

(<https://www.gov.uk/government/collections/south-marine-plans>);

Heart of the South West Local Enterprise Partnership's draft *Strategic Economic Plan*

(<https://heartofswlep.co.uk/about-the-lep/strategies-and-priorities/strategic-economic-plan/>)

Torbay Council's *Economic Strategy 2017-22*

(<http://www.torbay.gov.uk/media/10409/torbay-economic-strategy.pdf>)

Tor Bay Harbour's *Port Masterplan* (<http://www.tor-bay-harbour.co.uk/media/1016/port-masterplan.pdf>)

Section 1: Background Information

1.

What is the proposal / issue?

- 1.1 A number of factors are, in combination, driving the need for the oft-debated northern arm breakwater in Brixham harbour to be re-considered:
- the port's capacity to accommodate the commercial fishing industry has been reached both ashore and afloat;
 - interest from recreational harbour users in swinging moorings is declining in preference for walk-ashore berths;
 - the aging material state of the existing swinging moorings will soon require costly replacement if they are to be maintained;
 - the necessity to enhance environmental protection of the port to address safety risks and to safeguard against interruptions to industry resulting from increasingly experienced adverse weather.
- 1.2 These challenges can be addressed by further land reclamation between the Fish Quay and Oxen Cove, and conversion of the swinging moorings into walk-ashore piled pontoon berths. These would require environmental protection afforded by a northern arm breakwater, but this has hitherto proven prohibitively expensive because the designs have been based on traditional stone models.
- 1.3 Investigations have established that the required environmental protection can be achieved by a floating breakwater, which is both affordable and de facto future-proofed against changes in sea levels caused by climate change.
- 1.4 The proposed project benefits include:
- Up to 100 direct and up to 150 indirect new – not relocated - full-time employment opportunities;
 - Three new fish/shell-fish landing berths each capable of accommodating a beam trawler sized vessel;
 - Up to £10m pa growth in the value of fish and £4m pa growth in the value of shell-fish landed at Brixham;
 - Up to £14.28m Gross Value Added (£8.16m Net Value Added) into the locality;
 - The continued success of Brixham as a fishing port of strategic national value.
- 1.5 Project delivery costs do not exceed £14m (including 10% contingency) but deliver returns of £68.57m gross asset-life revenue (£37.51m net). This position could be further improved if grant funding could be obtained.

2.

What is the current situation?

The Fish Market was redeveloped in 2010 to meet the needs of a fishing industry which then was landing less than £20m of fish by value per annum. In 2017/18 more than £42m of fish was landed to the market (not including shell-fish and direct landings which have also similarly doubled) and the Fish Market is rapidly reaching capacity.

The associated growth in storage and transport requirements have often led to lorries being loaded beyond the Fish Market gates, as was the case prior to the 2010 development. This is a serious health and safety issue.

The Harbour Authority is increasingly receiving requests for additional space ashore from the fishing and shell-fishing. Mussel landings are forecast to grow tenfold and the crab industry has aspirations to grow at a similar pace by consolidating their national operations in Brixham, but cite lack of space ashore as the main factor currently thwarting these ambitions.

The existing swinging moorings, which will be replaced by a walk-ashore pontoon system, are increasingly expensive to maintain: the 'riser' chains frequently require inspection and replacement and the ground chain will shortly require to be changed too as it is reaching the end of its serviceable life - likely to be several hundred thousand pounds.

3.

What options have been considered?

The following options have been considered:

Options considered	Brief explanation of options (including justifying options exclusion where applicable)
Do nothing (maintain status quo)	This is the cheapest option but does not address any of the existing issues (climate change, lack of environmental protection, fishing industry at capacity) and is thus not recommended
Extend Fish Quay only	Extending the Fish Quay would cost ~£2.0m however it would be environmentally exposed and thus not usable during northerly inclement weather. It would however address lack of shore-side space and allow expansion of the dry (landward) elements of the fishing industry. There would be a risk that the additional revenue would not fully cover the costs of borrowing the ~£2.0m and hence this option is not recommended despite partially meeting this scheme's objectives

	Northern arm breakwater only	This would address existing environmental concerns and partially address climate change issues. It would also provide better protection to the existing facilities. There would be insufficient additional revenue to service repayment costs of the loan (~£9.0m) so this option is not recommended
	Replace swinging moorings with pontoon system only	This is not recommended as without the northern arm breakwater the pontoons would be too environmentally exposed; they would likely be damaged during winter storms. This option is not recommended
	Breakwater+ Fish Quay extension	This option meets most of the objectives however the increased fish tolls would not be sufficient to service the repayments on the project costs (~£11.0m) so this is not recommended
	Breakwater+ walk-ashore pontoons	Although this option meets the environmental protection and recreational mooring objectives, it does not address the lack of capacity in the fishing industry. However the additional pontoon revenues would return a profit in addition to servicing the ~£10.9m loan repayment costs. Although not recommended because it does not address the fishing industry issues it nevertheless could form 'phase 1' of a broader project and should be carefully considered if the main scheme is not taken forward.
4.	<p>How does this proposal support the ambitions, principles and delivery of the Corporate Plan?</p> <p>This project directly contributes to the following Corporate Plan targets:</p> <ul style="list-style-type: none"> • Working towards a more prosperous Torbay. <ul style="list-style-type: none"> ○ As the largest fishing port by value of landed fish in England and Wales, the industry is a key driver in Brixham in terms of direct jobs associated with the fishing industry. It is also significant in terms of indirect jobs in Torbay and the wider South Devon region in terms of engineering and repair, logistics, fish processing and retail, and transport. Furthermore, the industry is a significant contributor to the food chain both nationally and internationally. • Promoting healthy lifestyles across Torbay. 	

- The expectations of the recreational or leisure harbour user are evolving, with the current swinging mooring arrangements being eschewed for affordable 'walk ashore' pontoon facilities. There is declining demand for the existing swinging moorings despite the fact that local demand for moorings undoubtedly exists: the waiting lists for 'walk ashore' berths in both Dartmouth and Salcombe each exceed 500 customers¹. Replacement of the swinging moorings with a piled pontoon-based system is not possible without a northern arm breakwater as they would otherwise be too environmentally exposed.
- **Ensuring Torbay remains an attractive and safe place to visit.**
 - The provision of a 'walk ashore' system will make Tor Bay Harbour in general, and Brixham in particular, a more attractive destination for visiting recreational vessels.
 - The existing commercial fishing activities that take place in Brixham are often cited by tourists as a 'pull' factor for visiting Brixham. The growth of these facilities is likely to increase this 'pull' and result in an increased number of visitors from landward.

This scheme also meets the following DEFRA objectives articulated in their **South Inshore and South Offshore Marine Plan** (published 2018):

S-AQ-2	Supports proposals that enable the provision of infrastructure for sustainable fisheries and aquaculture
S-INF-1	Supports appropriate land-based infrastructure which facilitates marine activity
S-TR-1	Supports proposals that facilitate tourism and recreation activities
S-EMP-2	Supports proposals that result in a net increase to marine related employment
S-CC-1	Supports proposals that improve resilience to climate change

5.

How does this proposal contribute towards the Council's responsibilities as corporate parents?

Not applicable

¹ It is not possible to gauge demand in Tor Bay because of a policy of capping the length of waiting lists at 20, but it would seem incoherent that demand in the Bay is lower than other ports in the immediate vicinity.

<p>6.</p>	<p>How does this proposal tackle deprivation?</p> <p>This scheme will alleviate deprivation both within the industry (there will be more employment opportunities) and locally as a result of the additional Council revenues which will alleviate the budgetary pressures caused by existing adult and child services.</p> <p>Although historically a male-dominated industry, Fishers are increasingly drawn from all sex, gender and ethnic backgrounds and thus any expansion of the industry will de facto contribute directly to improved E&D outcomes.</p>
<p>7.</p>	<p>How does this proposal tackle inequalities?</p> <p>This proposal contributes towards tackling inequalities in health and education because it will increase the number of physically demanding fishing industry roles, many of which attract recognised vocational qualifications.</p>
<p>8.</p>	<p>How does the proposal impact on people with learning disabilities?</p> <p>This proposal does not impact on people with learning disabilities</p>
<p>9.</p>	<p>Who will be affected by this proposal and who do you need to consult with?</p> <p>This proposal positively impacts upon all Brixham harbour users, in particular the commercial fishers, recreational boat owners but indirectly the residents and visitors to Brixham who will benefit from the greater environmental protection and economic opportunities delivered by this scheme.</p> <p>Opportunities for public consultation will be presented as part of the process for obtaining terrestrial Planning and Development consent, the obtaining a Marine Management Organisation licence to undertake the works. It will have hitherto also taken place as part of the design stage.</p>
<p>10.</p>	<p>How will you propose to consult?</p> <p>If this scheme is adopted then a comprehensive and robust consultative framework will be developed to ensure that the scheme retains this high level of public support at every stage of development and operation.</p>

Section 2: Implications and Impact Assessment

11.

What are the financial and legal implications?

Legal

The Council, as the nominated Statutory Harbour Authority in the Tor Bay Harbour Act 1970, has *inter alia* a duty to ensure the following:

- To provide, conserve, maintain and improve the harbour and services and facilities afforded therein [s6 Tor Bay Harbour Act 1970];
- To see that the harbour is in a fit condition for a vessel to utilise it safely [Harbour Docks & Piers Clauses Act 1847];
- A general duty to exercise its functions with regard to nature conservation and other environmental considerations [s48A Harbours Act 1964].

The key provisions in local legislation regarding to the Authority's works powers are:

- Tor Bay Harbour Act 1970:
 - S9: extension and alteration of any tidal work;
 - S13: works in the harbour;
- Tor Bay Harbour (Oxen Cove and Coastal Footpath, Brixham) Act 1988:
 - S8: power to reclaim land and construct works;
 - S9: power to make subsidiary and accommodation works.

Financial

Indicative financial data can be found in Appendix 2. These figures are based on the following broad assumptions:

- The serviceable life of the breakwater pontoons exceeds 50 years. This is based on the product's designed lifecycle and reinforced by case studies of similar products which have already been in service for >40 years which have been assessed to have in excess of 10-15 further serviceable years remaining.
- The serviceable life of the mooring pontoons and pilings is 25-30 years. This is based on many examples of similar pontoons which have been in service for more than 30 years
- The mooring chains and anchors will last at least 10 years. Chains of similar diameter in Brixham harbour have lasted over 15 years.
- The reclaimed area between Oxen Cove and the Fish Quay will be relatively maintenance free, requiring a replacement road surface no more than once every 15 years.
- The occupancy of the additional walk-ashore pontoon berths will be 15% in year 1 due to in-year construction, 30% in year 2, 60% in year 3 and then 90% for year 4 and beyond.
- Berthing charges rise by 2% pa.

Appendix 2 tabulates the anticipated year-by-year financial position for the scheme. Over the first 40 years of the project the total expenditure is £29.887m and the total income is £40.965m, ie a net overall surplus of £11.078m surplus and ROCE of 79%.

Once the 40-year loan repayment is complete, project returns increase further. Total expenditure over years 1-50 of £31.069m and income of £60.458 which delivers a ROCE of 210%.

Projected revenue streams include:

- **Rental of pontoon berths.** Replacing the existing swinging moorings at the western side of the outer harbour with a pontoon berthing system permits an additional 190 new 10m berths in a smaller space than at present.
- **Rental of reclaimed land.** The area to be reclaimed between Oxen Cove slipway and the Fish Quay would yield a considerable rent. The business case assumes that the rental income is reviewed every 15 years with a 5% increase at each review.
- **Income from fish landings.** There is increasing interest from the Irish fishing vessels, up to 15 of which wish to land to Brixham for up to 3 months a year. This is equivalent to 5 full-time vessels landing. In addition, the Authority is aware that companies which already land to Brixham are procuring 3 new beam trawlers.
- **Income from shell-fish landings.** In addition to the forecast increase in shell-fish landings facilitated by the prospective jetty in Oxen Cove, the Authority understands that other shell-fishing companies wish to land to Brixham which would generate additional fish toll revenues to the Authority.

Grant funding will be sought, however in its absence the figures show that the business case could still remain viable: a loan of £14m from the Public Works Loan Board requires an annual repayment of **£657,013** based on a 3.25% interest rate fixed for the first 25 years, capital and repayment, reducing to £544,838 for years 26-40 after the loan on the mooring pontoon is repaid. Borrowing costs reduce by £45,028 pa for every £1m grant or other funding secured.

12.

What are the risks?

Risk of not implementing the scheme

Risk Description	Risk Mitigation
Fishing industry migrates to other ports due to lack of landing capacity and environmental exposure	Install northern breakwater arm and reclaim land off Oxen Cove to permit shore-side expansion
Loss of recreational vessel custom due to preference for 'walk ashore' vice swinging moorings	Install pontoon system within protection of a northern arm breakwater
Climate change: existing facilities (especially northern side of Fish Quay) becomes increasingly unusable	Install northern breakwater arm
Reduced fish toll revenues as a result of the above risks	None unless this scheme enacted. Add to corporate risk register

	<p>Risk of delivering the scheme</p> <table border="1" data-bbox="325 259 1426 497"> <thead> <tr> <th data-bbox="325 259 874 300">Risk Description</th> <th data-bbox="874 259 1426 300">Risk Mitigation</th> </tr> </thead> <tbody> <tr> <td data-bbox="325 300 874 378">Obtaining MMO licence</td> <td data-bbox="874 300 1426 378">Take environmental issues into account ab initio</td> </tr> <tr> <td data-bbox="325 378 874 497">Expected occupancy rates of pontoon system not met</td> <td data-bbox="874 378 1426 497">Review pricing structure to attract users; accept lower annual profit returns</td> </tr> </tbody> </table>	Risk Description	Risk Mitigation	Obtaining MMO licence	Take environmental issues into account ab initio	Expected occupancy rates of pontoon system not met	Review pricing structure to attract users; accept lower annual profit returns
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Expected occupancy rates of pontoon system not met	Review pricing structure to attract users; accept lower annual profit returns						
13.	<p>Public Services Value (Social Value) Act 2012</p> <p>If approval for this scheme is granted then the purchase of goods and services will strictly adhere to the Council's procurement policy.</p> <p>As part of this process, applicants will be required to show how their involvement will improve the economic, social and environmental well-being to Torbay, <i>inter alia</i> the use of local suppliers and materials where appropriate, the provision of educational/informative site visits to residents and harbour users etc. Advice and guidance will be sought from the Council's Procurement team as to how best to take this forward.</p>						
14.	<p>What evidence / data / research have you gathered in relation to this proposal?</p> <ul style="list-style-type: none"> • Analysis of historic meteorological and hydrographic records of Tor Bay to understand wave height, period and direction. • Documentary review of previous wave modelling data for Brixham harbour. • Review of previous Environmental Impact Assessments carried out for Oxen Cove to understand the environmental impacts of further land reclamation. • Review of previous sea-bed sediment core sample analyses to consider likely contaminant mitigation measures required during construction and use of reclaimed land and pontoon system. • Discussions with pontoon and floating breakwater designers to understand environmental parameters and limitations of use. • Site surveys with construction industry representatives. • Stakeholder meetings with commercial fishing industry and environmental representatives. • Review of dive survey records to identify material state of existing mooring infrastructure. • Soft market testing amongst breakwater design and construction companies. • Consultation with harbour users to confirm support for this scheme and to identify potential issues from the outset. 						
15.	<p>What are key findings from the consultation you have carried out?</p>						

	<p>There is a high level of support in principal for this project, evidenced from:</p> <ul style="list-style-type: none"> • A public workshop to update the Port Masterplan took place in Brixham which took place in May 2018. Attendees included representatives of the Council, Town Council, the yachting, sailing and rowing, local residents, commercial and recreational fishermen, and local businesses. There was universal support for a northern breakwater arm, land reclamation to permit expansion of the commercial fishing industry and walk-ashore berths. • A meeting with Dr Sarah Wollaston MP (at her request) during the Fishstock weekend in September 2018 at which she offered to support the scheme if taken forward. • An informal meeting with representatives of Natural England (a statutory consultee on the scheme) indicated that there would be no objections to such a scheme on environmental grounds, subject to the findings of a comprehensive Environmental Impact Assessment and the application of any identified mitigating strategies.
<p>16.</p>	<p>Amendments to Proposal / Mitigating Actions</p> <p>Ideas and issues raised during the consultation to date (outlined above) have been incorporated into the design of this scheme. Examples include:</p> <ul style="list-style-type: none"> • The size and location of the proposed land reclamation area to ensure sufficient distance from the closest residential buildings. • The location and length of the proposed floating breakwater. • The choice of materials for the pontoon walkways to minimise the shadow on the seabed. <p>Further proposals arising from future consultative events will similarly be considered for inclusion.</p>

Equality Impacts

17.	Identify the potential positive and negative impacts on specific groups			
		Positive Impact	Negative Impact & Mitigating Actions	Neutral Impact
	Older or younger people	Replacement of swinging moorings with walk-ashore pontoons will facilitate access to vessels, making recreational sailing more accessible younger people, ensure older people can continue their sport longer into old age and make sailing safer for all		
	People with caring Responsibilities			There are no differential impacts
	People with a disability	Replacement of swinging moorings with walk-ashore pontoons will facilitate access to vessels, thereby making sailing more accessible to those with a disability		
	Women or men	Fishers have historically been male however increasing numbers of women are becoming commercial fishers. The additional job opportunities should drive further diversity		The generation of up to 100 direct and 150 indirect FTE roles will have a positive impact on both women and men in terms of employment opportunities
	People who are black or from a minority ethnic background (BME) <i>(Please note Gypsies / Roma are within this community)</i>	The demographic of commercial fishers is increasingly diverse: where historically fishers have come from the local community, more are recruited from europe and further afield. The increase in		

	job opportunities should drive further diversity.		
Religion or belief (including lack of belief)			There are no differential impacts
People who are lesbian, gay or bisexual			There are no differential impacts
People who are transgendered			There are no differential impacts
People who are in a marriage or civil partnership			There are no differential impacts
Women who are pregnant / on maternity leave			There are no differential impacts
Socio-economic impacts (Including impact on child poverty issues and deprivation)	This scheme could deliver up to £14.8m GVA pa to the local economy which would have a significantly positive socio-economic impact and directly address deprivation		
Public Health impacts (How will your proposal impact on the general health of the population of Torbay)	Public health (both physical and mental) is positively impacted by the number of well-paid jobs, active lifestyles, increased access to sport and increased GVA. This scheme delivers all of these.		
16	Cumulative Impacts – Council wide (proposed changes elsewhere which might worsen the impacts identified above)	The additional fish toll revenues will provide additional financial resource to the Council	

17	Cumulative Impacts – Other public services (proposed changes elsewhere which might worsen the impacts identified above)	None identified at present
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