

Perth and Kinross Council

Perth Harbour

Business Plan

(April 2021- March 2026)

DRAFT



Contents

	Page
1. Executive Summary	3
2. Introduction	4
3. Vision and Strategic Objectives	5
4. Governance	7
5. Action Plan	9
6. Financial	25
7. Appendix	28
Appendix 1: Plan of Perth Harbour and Harbour Limits and Harbour Support Zone	28
Appendix 2: Summary of Relevant Legislation	30
Appendix 3: Schedule of charges 2021/22	31
Appendix 4: Storage - Case scenario	36

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1. EXECUTIVE SUMMARY

- 1.1 Perth Harbour is one of the City's many economic assets, supporting supply chain businesses for important industrial sectors, and balancing commercial needs with safe community use.
- 1.2 This business plan presents the Board's actions to revitalise and sustain Perth Harbour as an economic hub for the benefit of the local economy, environment and community over the period 2021-2026.
- 1.3 Based on a SWOT analysis, the following strategic objectives have been identified underpinning the above vision:
 1. To operate Perth Harbour safely and effectively in compliance with the Port Marine Safety Code and embed into business as business as usual operations
 2. To turn around Perth Harbour to a self-sufficient business which generates an operating surplus and which is promoting sustainable freight transport
- 1.4 Perth Harbour Board acts as the Harbour Duty Holder and provides the strategic overview. The Board is advised by a Designated Person in line with the Port Marine Safety Code (PMSC). Based on the Designated Person's audit, Perth Harbour has been reported compliant to the Maritime and Coast Guard Agency (MCA) in March 2021.
- 1.5 Objective 1 - Key actions:
 - Ensure that the harbour operations contract with Calmac Ferries Ltd is delivered and contract performance is monitored.
 - Continue to monitor and assess compliance and report compliance to the MCA.
 - Review Bylaws and Harbour Directions.
 - Following Brexit, identify and put in place the best Border Operating Model's option by 1 October 2021 as well as Border Control Point requirements.
 - Maintain Pilotage services.
 - Update defect register and identify, prioritise and carry out actions to remedy defects.
 - Monitor the use of the Fair Maid by Montrose Port Authority and by any other users.
 - Ensure that appropriate surveys are carried out in line with the SMS and supply the most recent survey information to the UK Hydrographic.
 - Secure consents and carry out maintenance dredging deemed as and when needed.
- 1.6 Objective 2 – Key actions:
 - Reduce deficit by 32% from 192k in 2020-21 to 131k in 2025-26. If this projected trend continues beyond the period of this Business Plan, a breakeven position could be achieved.
 - In 2021-22, attract an additional 6,000t to 30500t and 27 ships focusing on fishmeal and baryte with a projected estimated gross income of £106,000. By 2025-26, the target will raise to 59 ships, 65,000t and £283,000.
 - In 2021/22, continue to Charter the Fair Maid to Montrose Port Authority or to other third parties with a projected estimated gross income of £60,000.

- In 2021/22, develop services to marine users with a projected estimated gross income of £1,000.
- Discuss the product offer with stevedore and storage providers and develop marketing plan and related activities in close liaison with stevedore and storage providers. Key messages would be on safety, quality of service and carbon emission benefits.
- Organise at least one annual event for all river users and at least 2 events with harbour users.
- Maximise community benefits.
- Present proposals to take forward options to develop storage within the Harbour Support Zone and to maintain/increase tidal window.

2. INTRODUCTION

- 2.1 This business plan aims to present the course of action to revitalise Perth Harbour as a sustainable economic hub for the benefit of the local economy, environment and community.
- 2.2 Perth Harbour was established at its current location on the River Tay in the 1840s and is owned by Perth & Kinross Council (PKC). Harbour operations are contracted to Calmac Ferries Ltd for a period of 5 years until 2 July 2023, with a possible 2 year extension
- 2.3 The Harbour comprises a tidal basin of about 1.2ha situated 22 miles upstream from Dundee and 30 miles from the North Sea. Perth Harbour is a NAABSA (Not always afloat but safely aground) designated harbour, the bottom consisting of soft mud. There are 4 principal berths: Berth Number 1: 89m; Berth Number 2: 134m; Berth Number 3: 128m; Berth Number 4: 66m.
- 2.4 Warehousing and storage are not under the direct control of the Harbour Board. Most active warehousing and storage yards are owned by or leased to private operators, who also conduct all stevedoring. PKC and the Perth Common Good Fund are the major landowners leasing land and buildings to third parties. Although some of these leases have conditional clauses linking them to harbour use, the generated income is not allocated to the Harbour Budget, but rather to the PKC General Fund or the Perth Common Good Fund (PCGF) which are also responsible for any related costs. Mobile cranes are available for cargo handling with Safe Working Load (SWL) from 5 to 40 tonnes. Bulk grain elevators, forklifts and modern handling machinery are also available.
- 2.5 Perth Harbour is a Competent Harbour Authority under S.I. 2007 No. 482 "The Perth Harbour Revision Order 2007". The Port Marine Safety Code, issued in 2016, sets standards for the operation of UK Ports. It codifies Duties and Responsibilities of harbour authorities and requires that ports be operated on the basis of Risk Assessment and a Safety Management System. Perth Harbour Authority has established a Safety Management System which demonstrates Perth and Kinross Council's commitment to operating Perth Harbour in a safe and environmentally sound manner to the benefit of staff, vessels and their crews, pilots, users and the community at large in line with the Port Marine Safety Code.

- 2.6 Perth Harbour is one of the City's many economic assets, supporting supply chain businesses for important industrial sectors, and balancing commercial needs with safe community use. The harbour has a positive economic impact on the wider area from Aberfeldy to Methven. Although the number of businesses presently using the harbour is small, the businesses are dynamic, innovative and many are international in nature. The Harbour is estimated to generate £3.9 million Gross Value Added (GVA) per annum and support 54 jobs throughout Perth and Kinross at present. Across Scotland this impact grows to £5.5 million GVA and 74 jobs (base 2017/18) (Economic Impact of Perth Harbour – Calmac/Biggar economics – 2021). The Harbour supports other nearby facilities such as warehousing which generate income to the Council (£79,280 in 2020/21).
- 2.7 However, Perth Harbour has experienced a long term decline over the last 25 years in terms of vessels, tonnage handled and income generated. The number of vessels per year has declined from about 300 in 1990 to around 20 now, although this has recently slightly increased. A number of external factors partially explain this including the growth of competitors, the increase in ship size and general economic conditions. There are also some internal factors including staff commercial experience, lack of an integrated offer due to disjointed relationship with stevedores and warehouse owners, and fragmented land ownership. It was worth noting over the past 20 years at least that harbour operations have required to be supported by a recurring revenue budget allocation as income never covered the operational costs. The budget allocation for 2021/22 is £178,200.
- 2.8 The business plan has been agreed by the Harbour Board and was produced in consultation with stakeholders including Calmac Ferries Ltd. It relates to the period April 2021-March 2026 which is beyond the current harbour operations contract, which could be extended until June 2025.

3. VISION AND STRATEGIC OBJECTIVES:

3.1 Vision

The overall vision for Perth Harbour is:

“To revitalise Perth Harbour as a sustainable economic hub for the benefit of the local economy, environment and community”

3.2 SWOT analysis

A SWOT was prepared to inform the vision and strategic objectives. This is set out below.

3.2.1 Strengths

Geographic location and communications: Good road links position Perth Harbour well for the heavily populated Central Scotland. Perth Harbour is also well positioned to serve the North and North West of Scotland as arterial routes can be accessed directly with a very short transit and linking to these key markets. As an inland harbour, Perth Harbour could contribute to remove road traffic and cut emissions through a more direct

central access to arterial routes. Road haulage road would emit 5 times more than maritime shipping.

Good productivity: Perth is recognised as having a quick turnaround relative to the competition. Turnaround can usually be delivered in one tide (up to 1,500t - average 1,160t).

Committed customer base: Local businesses have been loyal and remain committed despite tidal constraints. A number of these businesses have been investing in port related business activities.

Established market position: Key cargos of timber, baryte and animal feed are well established.

Physical Infrastructure: Significant quays in serviceable condition and substantial covered storage.

Governance: The present governance and management systems are robust.

Commercial focus: There is an improved focus on profitability and financial management, and market knowledge is developing.

3.2.2 Weaknesses

Accessibility: Perth Harbour is mainly inaccessible for half the time (over the tide cycle) for a significant proportion of the vessels that use it. There are also height restrictions at Tay Bridge preventing larger vessel to use Perth Harbour.

Tidal effect: The long tidal channel in the River Tay adds time to calling at Perth and limits time on the berth over one tide.

Open Storage: There is limited open storage and no coverage storage within the harbour estate.

Recent master plan: A physical master plan for the Harbour estate and its immediate environs is being developed.

Small customer base: Presently there are only few active customers; they in turn have a small customer base.

Human Resources: There is a risk in relation to securing pilotage services in the long term.

3.2.3 Opportunities

Improve commercial / financial management

- Compete for available pool of cargoes
- Restructure/Reassess tariffs/ charges, dues
- Charge for all facilities/services provided
- Agreements review; Minimum take terms/link to throughput

- Review stevedoring rights/licensing
- Assess potential for grant funding for projects and management support
- Change in international trade agreements

Human Resources Plan via Harbour operations contract with Calmac Ferries Ltd

- Skills and experience can and should be developed in; market knowledge, project implementation and regulatory/ statutory process management.
- Succession; Harbour Master, Assistant Harbour Master and pilots
- Recruitment of appropriate resources

Governance, organisation and management and planning

- Clear commitment from Harbour Board
- Development of 4 year business plan in partnership with Calmac Ferries Ltd and other partners
- Clear management line with responsible person reporting to senior level within PKC.
- Improved marine accessibility through possible review of the River Tay navigation channel
- Re-planning and change of land use e.g. covered → open storage.

Environmental Drive

- Climate Change and the trends to short sea shipping are influencing policy requirements to reduce carbon emissions particularly from transport and contributing to promote Perth Harbour as inland port reducing road freight traffic. Road haulage would emit 5 times more than maritime shipping.

Address Forth Ports/Port of Dundee issues

- Possibility to review current Dundee dues
- Possibility to review pilotage in Dundee waters

3.2.4 Threats

Competition from well-established ports

- Private sector competition, well-funded PLC competitors.
- Enabling 'new entrants' such as Kirkcaldy

Trends in shipping

- Long term trend to larger ships to achieve economies of scale
- Long term decline in the number of smaller ships being built
- Change in international trade agreements

Forth Ports – Dundee issues

- Dues charged on vessels transiting to Perth Harbour
- Pilotage charges
- Lack of cooperation on single pilot for transit to Perth Harbour

3.3 Strategic Objectives

3.3.1 Based on the SWOT analysis, the following strategic objectives have been identified underpinning the vision:

- To operate Perth Harbour safely and effectively in compliance with the Port Marine Safety Code and embed into business as usual operations
- To turn around Perth Harbour to a self-sufficient business which generates an operational surplus and which is promoting sustainable freight transport

4. GOVERNANCE AND MANAGEMENT

4.1 Governance

Harbour Duty Holder

In line with the Port Marine Safety Code (PMSC), PKC as a Harbour Authority has set up a Harbour Board comprising five Councillors with a particular interest or experience to act as the Harbour Duty Holder who is accountable for safe and efficient marine operations.

Responsibilities of the Duty Holder (extract PMSC November 2016):

Organisations must have a “duty holder” who is accountable for their compliance with the Code and their performance in ensuring safe marine operations. For most organisations, the role of duty holder is undertaken by members of the management team or a board who are both collectively and individually) publicly accountable for marine safety under the Code.

The duty holder is responsible for ensuring that the organisation complies with the Code. In order to effectively undertake this role they should:

- be aware of the organisation’s powers and duties related to marine safety;
- ensure that a suitable MSMS, which employs formal safety assessment techniques, is in place;
- appoint a suitable designated person to monitor and report the effectiveness of the MSMS and provide independent advice on matters of marine safety;
- appoint competent people to manage marine safety;
- ensure that the management of marine safety continuously improves by publishing a marine safety plan and reporting performance against the objectives and targets set; and
- report compliance with the Code to the Maritime and Coastguard Agency (MCA) every 3 years.

As Duty Holder, all Harbour Board members have received PMSC training as part of their induction.

In addition to its role as Duty Holder, the Board provides strategic directions and public representation. This provides robust governance arrangements.

The Harbour Board meets quarterly and reports annually to the relevant PKC’s Committees.

The Board communicates with river and harbour users through the river/harbour user forum which meets at least once a year. However, the Harbourmaster develops an on-going dialogue with river and harbour users.

Designated Person

The Designated Person (DP) role is to provide an effective level of assurance, through assessment and audit to the Duty Holder. An external DP has been appointed. The DP is suitably trained and qualified and monitors and assesses the harbour against the PMSC requirements on an ongoing basis throughout the year with reports to the Board.

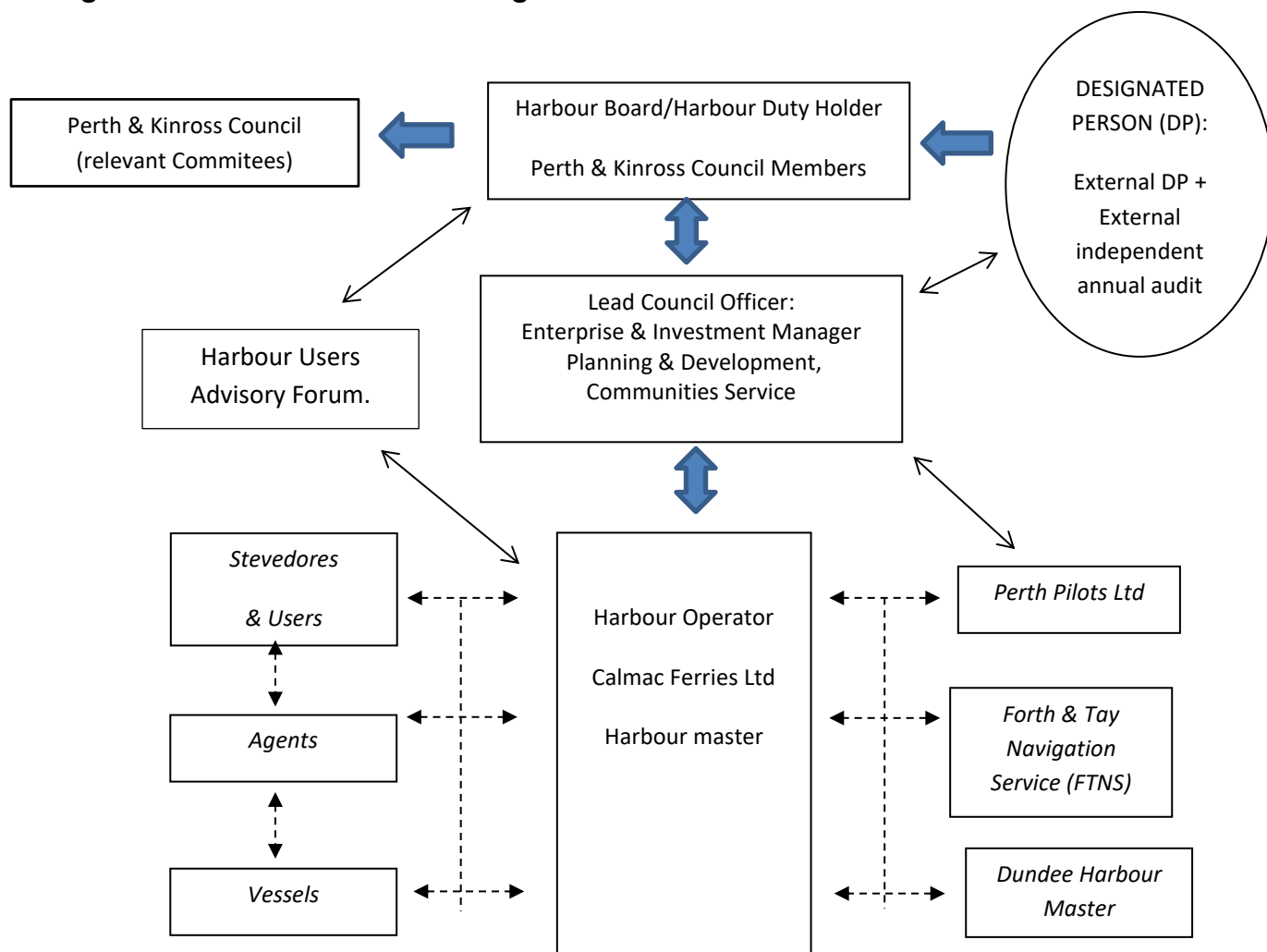
4.2 Management

As stated in PKC's Scheme of Administration, the Harbour is within the responsibilities of the Executive Director (Communities). There is a line management link between the Executive Director and the operation of the harbour through a Lead Council Officer. The lead officer's role is to improve performance, manage risk and bring a more focussed commercial approach.

The Lead Council Officer supports the Board and implements the Board's decision where this does not require specific Committee approval.

The Lead Council Officer acts as the Council's senior responsible owner and ensures that the harbour operations contract with Calmac Ferries Ltd is delivered as agreed. Monthly operations meetings are organised between the Lead Council Officer and Calmac Ferries Ltd.

Diagram 1 details the Governance and Management Structure.

Diagram 1: Governance and Management Structure

5. ACTION PLAN

The action plan details the actions which will support the delivery of the strategic objectives.

Strategic objective 1:

To operate Perth Harbour safely and effectively in compliance with the Port Marine Safety Code and embed into 'business as usual' operations

The following actions have been identified to support the delivery of the Strategic Objective 1. It is important to note that these actions are included in this business plan to reflect the progress which have been made and which should be maintained during the business plan period. However, the objective is for these actions to be embedded into 'as 'business as usual' operations by the end of the business plan period.

5.1 Maintain and review the Safety Management System including annual audit compliance

The Safety Management System (SMS) for Perth Harbour was audited in 2018 by the appointed Designated Person (Nash Marine Ltd) which concluded that Perth Harbour Authority was compliant. Since then, the DP has reported to the Board in January 2020 and August 2020. A revised SMS was agreed by the Harbour Board in November 2020 and is now in place. The Lead Council Officer has reported compliance in 2021.

Action: The Designated Person will continue to monitor and assess compliance on an on-going basis and will produce at least 2 reports to the Board in 2021, 2022, 2023, 2024 and 2025. The Lead Council's Officer will report compliance to the MCA in 2024.

5.2 Maintain and review Marine Safety Management Plan and other procedures/plans including Emergency plan and Bylaws

Since July 2018, Harbour operations have been contracted out to Calmac Ferries Ltd. The current Emergency Plan was under review to ensure that processes and procedures are aligned with new operator processes and procedures.

The Emergency Plan was revised in July 2018 and is still in place. An annual review will be carried out.

The current Byelaws came into effect on 11 January 2003 in accordance with Section 83 of the Harbour, Docks and Piers Clauses Act 1847 as incorporated into the Perth Burgh and Harbour Act 1876, and Section 202 of the Local Government (Scotland) Act 1973 as amended by the Civic Government (Scotland) Act 1982. The purpose of which are to regulate and control the activities of persons and the movement and berthing of vessels within the Perth Harbour area and port limits.

Perth Harbour will have to put in place a Border Operating Model to meet Customs requirements post-Brexit by October 2021 as well as Border Control Point requirements.

Action: PKC will review Bylaws in 2021 to come into effect by March 2022. Harbour Directions will also be updated as part of the review. The Harbour Board and Lead Council Officer will identify and put in place the best Border Operating Model's option by 1 October 2021 as well as meeting Border Control Point requirements.

5.3 Deliver Harbourmaster responsibilities on the area over which the Council has navigation powers as a competent harbour authority in compliance with all appropriate legislation pertaining to port operations.

The Harbourmaster responsibilities are delivered through a contract with Calmac Ferries Ltd until 2 July 2023 with a possible 2 year extension. Calmac has to comply with all appropriate legislation pertaining to port operations including professional qualifications and competencies for port marine personnel.

The Harbour Board as Duty Holder monitor the contract performance on quarterly basis with day-to-day contacts delivered by the Council Lead Officer.

Action: The Harbour Board and Lead Council's Officer will continue to monitor contract performance in relation to Harbourmaster responsibilities.

5.4 Maintain and review Pilotage and berthing arrangements for vessels using the port.

Following the introduction of the Scottish Statutory Instrument 2006 No 49, "The Perth (Pilotage Powers) Order 2006" whereby PKC (Perth Harbour) were assigned as a competent harbour authority (CHA) for the purposes of the Pilotage Act 1987, pilotage within their prescribed district (same as SHA) has been non-compulsory. However, since the introduction of these powers every vessel transiting the CHA area bound to and from one of the 4 berths always has a pilot. Whilst Perth CHA has a duty of care under the Pilotage Act 1987 for ships, pilots and crews transiting through their area they have not imposed any Pilotage Directions governing the safe transit of those vessels and persons.

For the purposes of the SMS, the provision of pilotage is to be treated as a risk reduction measure, to be considered with other measures to mitigate the risks in question.

A pilotage risk assessment was carried out as part of NRA to determine the need for compulsory pilotage. Following that assessment, Perth and Kinross Council as the Harbour Authority has now introduced Pilotage Directions to make pilotage compulsory.

As Harbour Authority, Pilotage Services must be provided and is a vital element of service delivery. PKC has worked closely with Calmac Ferries Ltd to set up a contract for pilotage services which is now in place. Four pilots are trained and authorised.

Action: Pilotage services will be maintained over the period of the Business Plan.

Pilotage in Dundee waters

Dundee are entitled to require a pilots to be used in their waters for any vessels over 40 metres in length and to make reasonable charges for the provision of pilots in their waters and Dundee do not allow joint pilotage i.e. allowing Perth pilots to operate in their waters.

As a Pilotage Services contract is in place for Perth waters, there could be an opportunity to review pilotage option in Dundee waters.

Action: A review of pilot options in Dundee waters will be carried out by March 2022.

5.5 Inspect and maintain quays, property, roadways and equipment using defect register

Since July 2018, Harbour operations have been contracted out to Calmac Ferries Ltd and the actions identified below will be delivered by Calmac and PKC.

Quayside Survey

As part of the handover, a quayside survey has been carried out and has recommended works or future planned maintenance. These are recorded in the defect register.

Roadways, lighting and other equipment

As part of the handover, a conditions survey has been carried out and has recommended works or future planned maintenance. These are recorded in the defect register.

Harbour Offices

As part of the handover, a schedule of conditions has been carried out and has recommended works or future planned maintenance. These are recorded in the defect register.

Each defect in the defect register is recorded under the three different categories:

- Critical: to be addressed within 30 days
- Operational: to be addressed within 90 days
- Notifiable: to be addressed with 180 days

Action: The defect register will be updated and reviewed on an on-going basis. Actions to remedy defects will be identified, prioritised and carried out.

5.6 Inspect and maintain all aids to navigation (AtoN) in line with Northern Lighthouse Board's requirements using defect register

Since July 2018, Harbour operations have been contracted out to Calmac Ferries Ltd. As part of the handover, a condition survey of AtoN has been carried out and has recommended works or future planned maintenance. These are recorded in the defect register.

Each defect in the defect register is recorded under the three different categories:

- Critical: to be addressed within 30 days
- Operational: to be addressed within 90 days
- Notifiable: to be addressed with 180 days

Action: The defect register will be updated and reviewed on an on-going basis. Actions to remedy defects will be identified, prioritised and carried out.

5.7 Inspect, maintain and operate the harbour tug/workboat as per Marine Coast Agency regulations governing the operations of small work boats.

In May 2007, Perth & Kinross Council took delivery of a new workboat. The 13 metre twin screw craft named “Fair Maid of Perth” was designed by Macduff Ship Design and constructed by Macduff Shipyards. The vessel has twin Iveco Cursor 330 H.P. engines driving fixed pitch propellers in Kort nozzles. To increase manoeuvrability in the close confines of the River Tay. The vessel is fitted with a Kort 320 kg thrust bowthruster. Deck equipment includes a winch and towing hook enabling it to be used as a harbour tug and an “A” frame and detachable plough for dredging operations. A Guerra deck crane is installed to facilitate the lifting and repositioning of navigation buoys. “Fair Maid” also carries a fire monitor on top of the wheelhouse thus providing firefighting capability. The Fair Maid has been fitted with a AIS system (localisation system).

Since July 2018, Harbour operations have been contracted out to Calmac Ferries Ltd. As part of the handover, a condition survey of Fair Maid of Perth has been carried out. These are recorded in the defect register.

Each defect in the defect register is recorded under the three different categories:

- Critical: to be addressed within 30 days
- Operational: to be addressed within 90 days
- Notifiable: to be addressed with 180 days

Action: The defect register will be updated and reviewed on an on-going basis. Actions to remedy defects will be identified, prioritised and carried out.

The Fair Maid of Perth has been certified until 7 May 2022 and meets all requirements.

Calmac Ferries Ltd is responsible for the tug/workboat operations as per MCA regulations.

The Fair Maid has been chartered to Montrose Port Authority until December 2023. In line with BICOM Bareboat charter, responsibilities for tug/workboat day-to-day operations are the responsibilities of the tenants when the owner retains the responsibilities for certification, maintenance and structural repairs.

Action: The Lead Council Officer, together with Calmac Ferries Ltd, will monitor the use of the Fair Maid by Montrose Port Authority and by any other users if relevant.

5.8 Inspect and maintain navigation channel including maintenance dredging where needed

A comprehensive bathymetric survey of Perth Harbour approaches and the channel through the River Tay was conducted in April 2015 (Aspects Surveys) using multibeam sonar to a scale of 1:1250. Dredging feasibility surveys were also conducted in August 2015 and April 2016.

The survey results produced show that the river is currently deep enough to continue to bring up vessels of up to 4.2m draught.

However, the data from the later surveys should be compared with the full 2015 Bathymetric Survey and further back to ascertain any silting/scouring trends, which will assist the Perth Harbour in refining its formal policy for conducting hydrographic surveying and to review the warning notice on the chart 1479. The Harbour authority should supply the UK Hydrographic Office with information that may be needed for their Admiralty charts and other publications.

Article 9.2 of the SMS states that survey should not exceed 5 years. A complementary survey was carried out in 2020 to assess the possibility of reviewing how the navigational channel could be used differently to improve accessibility without the need for dredging.

One-off surveys are also commissioned if a specific area has been identified as ‘in need of a survey’ by pilots or harbourmaster

Action: The Lead Council Officer with Calmac Ferries Ltd will ensure that appropriate surveys are carried out in line with the SMS. Calmac Ferries Ltd will supply the most recent survey information to the UK Hydrographic Office and other bodies.

If an area is deemed to reduce 4.2m draught, maintenance dredging will have to be carried out. Section 24 of the Perth Harbour City Improvements and Gas Act 1897 (“1897 Act”) provides that subject to obtaining the consent of the Scottish Ministers, the Council has powers to dredge the Harbour and to procure necessary equipment. The Harbour Authority will have to secure consent from land owners and Marine Scotland for capital or maintenance dredging and disposal plus monitor adherence to any consent conditions. The majority of the costs for such dredging are likely to be the mobilisation costs of bringing equipment and vessels to site location.

Action: The Lead Council Officer with Calmac Ferries Ltd will secure consents and carry out maintenance dredging deemed as and when needed.

Strategic objective 2:

To turn around Perth Harbour to become a self-sufficient business which generates an operational surplus and which is promoting sustainable freight transport

The following actions have been identified to support the delivery of the Strategic Objective 2.

5.9 Consolidate existing and expand costal cargo shipping customer base

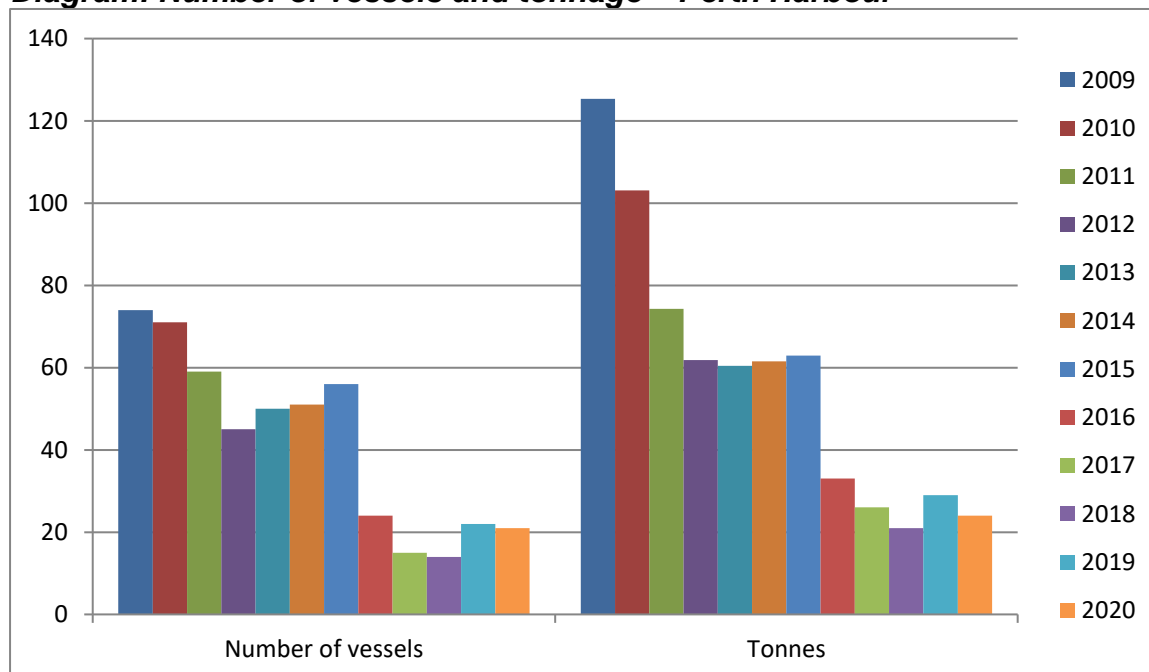
Costal cargo shipping market analysis

Before looking at existing and future customer base, it is important to provide an analysis of the market. The market trends show a reduction of freight traffic over the period 2000-2019 particularly for minor ports such as Perth Harbour. There are 12 major ports in Scotland including Dundee which is owned by Forth Ports Ltd. Forth Ports Ltd represent 38% of major ports traffic volume (25.2 million). There are 31 minor ports in Scotland with Inverness, Lewrick and Montrose representing 48% of traffic volume (1.73 million).

Scottish ports handle a wide range of cargo, with an array of dry bulk goods such as coal, timber, aggregates, paper, agricultural products, fertilizers, peat, salt and scrap metal entering and leaving the country through ports every day. Dry Bulk cargo in Scotland includes ores including scrape, agricultural products (grain, wheat, soya, beans, tapioca), forestry products (timber, wood pulp, paper), other bulk solids (cement, aggregate, wood pellet, wood chip). The ports industry also handles people and supplies for the offshore energy industry and are supporting decommissioning of oil and gas installations.

Over the period 2000-2021, Perth Harbour freight tonnage reduced by 90% from 226,000 to just under 24,000 tonnes. Perth represents 0.033% of the total Scottish Market – in tonnage. Perth has 0.6% market share of the Scottish ‘Minor Ports’ market.

Diagram: Number of vessels and tonnage – Perth Harbour



Customer base

Although a sales and marketing initiative should have an impact on stimulating demand from existing and new users, these decision makers are not direct customers of Perth Harbour. The shipping industry is complex in that a number of stakeholders have an interest in a ship and its cargo. The direct customers that Perth Harbour serves are actually stevedores and ships agents.

At Perth Harbour there is a very small number of direct customers, only one or two in the two customer classes. There is a larger market spread across the country, not surprisingly clustered around port hubs and regionally based.

Stevedores

There are 2 Stevedores: CPL Calport and Glenalmond Timber.

Although primarily customers, they make up an important part of the supply chain to deliver Perth Harbour services. As such this relationship is more complex to manage than a simple customer client relationship and adds to the need for relationship building and partnership working.

Ships' agents

Ships' agents settle the following fees:

- Harbour dues
- Water and waste charges
- Boatman charges
- Pilotage service charges

There are now 2 ships' agents using Perth: Kinnes Shipping Ltd and Scotbroker. Galaxy Shipping is now part of Scotbroker and KJM is no longer trading. The table below details tonnages per agent for the last 3 years.

Ships agents	Tonnes		
	2018	2019	2020
Kinnes Shipping Ltd	8,075	14,682	16,441
KJM (no longer trading)	3,427	-	-
Scotbroker (Andrew Martin)	2,075	14,800	7,541
Galaxy Shipping (until Jul.18 – from Jul.18 Scotbroker)	7,074	-	-
Total Harbour	20,651	29,482	23,982

Although there are customers, they are a key element of the supply chain to deliver Perth Harbour services. As such this relationship is more complex to manage than a simple customer client relationship and adds to the need for relationship building and partnership working. The small number of agents with experience of bringing ships to Perth makes them even more critical.

Competitor analysis

The main competitors are Montrose Harbour Trust, Inverness Harbour Trust and Forth Ports Ltd operating Dundee, Methil and Kirkcaldy ports.

Threat of substitutes

As well as the competitive port environment, there is also consideration to be made of substitutes and in this case alternative modes of transport if costs were to change significantly or other forces such as political or legal changes. Possible substitutes are:

- Road haulage: Although more expensive over longer distances there is a threat of road haulage being used in conjunction with other ports such as Dundee or Kirkcaldy.
- Rail: This mode of transport could replace any UK journeys but as much of the cargos come across the North Sea it is unlikely this mode of transport would displace Perth harbour traffic
- Air: Unlikely due to the weight to value ratio of goods arriving at Perth

Threat of new entrants

The risk of new entrants is low as barriers to entry are very high with limited opportunities for new ports to be developed and very high capital costs. However, it is worth noting the re-opening of the tidal harbour at Kirkcaldy in 2011 following a 20 year gap.

Diversified versus niche

There is a risk of being overly dependent on too few types of cargo or more specifically one customer. There is a balance to be found between finding niches and having a diversified customer base. PKC has limited power to influence this, but should be mindful of it and where possible support agents, stevedores and other stakeholders to minimize this risk.

Proposed Cargo type Targets:

It is proposed to target the following dry bulk cargo shipping by securing existing cargo and attracting new cargo (or cargo which has left):

Securing existing dry bulk cargo (import/export)

- Timber import (14,128t in 2019, 7,541t in 2020)
- Fishmeal import (EWOS, a supplier of feed and nutrition for the international aquaculture industry represented 32 ships and 33k tonnes of salmon feed in 2014) (5,730t in 2018, 13,280t in 2019, 3,832t in 2020)

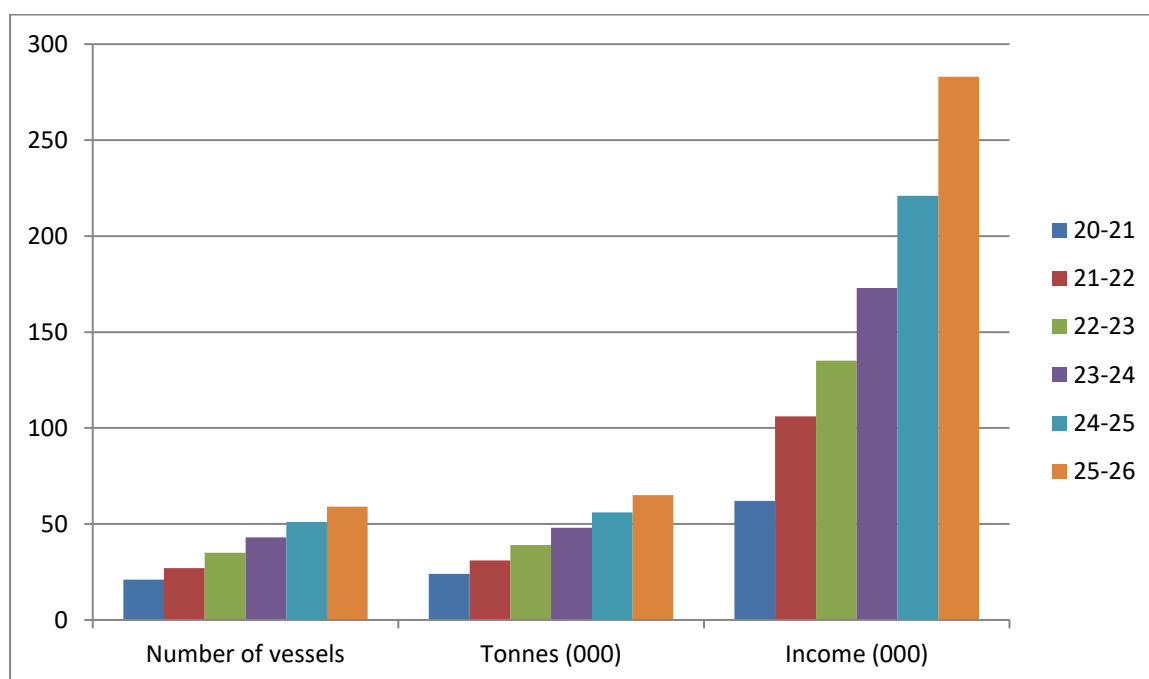
- Soya protein import (8,008t in 2020)

Securing new (previous) dry bulk cargo (import/export)

- Baryte export (1,318t in 2018)
- Wood Chip (1,403t in 2019)
- Corn Gluten (985t in 2018)
- Aggregates (Balfour Beattie contractors use the harbour to transfer aggregates for A85 road – Cross Tay Link Road Contract) including sea dredge aggregates
- Soda Ash
- Wood pellet
- Grain
- Wheat
- Beans

The Business Plan target is to increase total tonnage from 22,000t to 64,500t by March 2026 and number of ships from 19 to 59. This would mean an additional 8,500t every year and an additional 8 ships every year. In that context, increasing Fishmeal again, attracting baryte cargo again as well as sustaining/increasing timber seem to be the most critical actions and should inform investment decisions in relation to storage and stevedore provision and related infrastructure as well as stakeholders engagement.

Targeted number of ships, tonnage and cargo income (5 years - 2021-2026)



Action: In 2021-22, Perth Harbour will attract an additional 6,000t to 30,500t and 27 ships from 21 by securing existing cargo and attracting new cargo (or cargo which has left) focusing on fishmeal and baryte - Projected estimated gross income 2021/22: £106,000. By 2025-26, the target will raise to 59 ships, 64,500t and gross income of £283,000.

5.10 Expand non costal shipping including leisure

MV 'Fair Maid of Perth' Workboat Chartering

The Fair Maid of Perth workboat is a valuable asset (insurance value: £350,000) and has attracted chartering interests over the years. However, these were not pursued effectively. Following discussions with Montrose Port Harbour Authority, the Fair Maid has now been chartered to Montrose Port Harbour Authority for 24 months until 21 December 2023 in line with Bimco Barecom Standard Charter 'Barecon 2001'. Perth Harbour will retain access to the workboat if and when needed. The charter will generate income from hire.

Action: PKC with the support of Calmac will charter Fair Maid of Perth to Montrose Port Authority or to other third parties. Projected estimated gross income 2021/22: £60,000 (£107,250 has been generated between January 2019 and March 2021). This target is to sustain the 2021/22 level of gross income per year over 5 years.

Services to marine users

Certain marine users need a base to store, re-stock and maintain their fleets e.g. marine construction, services and leisure. Although distant from off-shore sites, Perth Harbour will be marketed as a base which can be reached easily due to its close connections to road and rail networks.

Marine commercial and leisure personnel have to meet professional qualifications and competencies to be able to work or use marine crafts. Perth Harbour will be marketed as a training centre to learn and sit exams using a working harbour site and access to workboat via RYA Training Centre recognition. These alternatives activities would have to be developed without constraining cargo activities. It is the intention to explore the use of the limestone quay located further north on the river.

Action: PKC with the support of Calmac will develop services to marine users. Projected estimated gross income 2021/22: £2,000. This target will increase to £4,000 per year by 2025-26.

5.11 Develop and review marketing plan

It is important that the PKC and Calmac Ferries Ltd work together to successfully deliver marketing activities as well as working closely with other stakeholders delivering services at or for the Harbour.

Objectives

This marketing plan will outline suggested sales and marketing activity to deliver on strategic objectives. The primary objectives of the marketing exercise are to make the proposition at Perth Harbour more attractive to existing and potential users and to communicate this to them.

Competitive advantage

- Location at the heart of the country and connected to the roads network resulting in savings in road haulage within Central Scotland
- Speed of turnaround with flexible nature of the workforce, although this is not directly under the control of the Board
- The 'can do' and positive attitude (PKC/Calmac/other parties)

Product

The 'product' or services provided are services to support vessel movements and loading, off-loading and storage of cargos.

The charges for services are:

- Shore Dues based on the cargo loaded or unloaded and any ancillary services (lifting machinery)
- Harbour dues – for vessels berthing at Perth
- Water Charges – for loading of fresh water
- Waste services.
- Boatman services – assistance in berthing and manoeuvring
- Tay Buoy dues – for 'use' of the managed channel to Perth Harbour
- Pilotage Services charges
- Stevedore
- Storage

The services are divided between the two customer types:

Stevedores

They pay Shore Dues based on the cargo loaded or unloaded and any ancillary services.

Ships agents

They pay Harbour Dues, Water and waste charges, Boatman Charges and Pilotage services charges.

Although the services sold are intangible the harbour is very much a physical offering and the enabling infrastructure (including the channel) is vital to the delivery of these service.

There is of course a statutory framework for the physical attributes to adhere to. PKC (and Calmac) does not have control on the overall product and services sold, namely stevedoring and storage.

Action: PKC will discuss the product offer with stevedores and storage providers by October 2021.

Sales Strategy

It is proposed to focus on sales more than marketing with more emphasis given to a more traditional sales effort. With the interdependent nature of sales at Perth Harbour any sales process should be collaborative to a certain extent as PKC offers vital services to facilitate the sale of their clients.

Potential sales leads and business development activity could be developed around the following activity:

Trade shows/Conferences to exhibit, typically with space for a stand alongside other trade exhibitors, communicate the 'Open for Business' message and establish new industry contacts and developing existing relationships (e.g. Annual British Ports Authority Conference).

Networking/memberships to develop further personal business development channel (e.g. British Ports Association).

Direct marketing such sale letters, email marketing, LinkedIn

Alliance sales through collaborative approach with businesses working together on a shared goal (e.g. a multi-business Perth Harbour stand at a trade show).

Marketing communications strategy

The marketing strategy for Perth Harbour should support the sales effort. It should be designed for the purposes of business to business sales. As such it does not to be promotion heavy or advertising driven. Nor do channels popular in the consumer marketing domain need to be developed such as twitter and Facebook. A business focussed social media channel such as LinkedIn could add greater value by connecting interested professionals.

Marketing Management

Website to present the harbour's USP and provide basic operational and navigational information a website has been developed - www.perthharbour.co.uk. It is updated by the harbour team.

PR with regular press releases and strategic use around campaigns working with Invest in Perth.

Events with attendance at local or national events or organise an annual event at Perth Harbour

Advertising on site (e.g sign) and in publications (e.g. Port of Scotland Year Book).

Action: PKC and Calmac Ferries Ltd will develop a marketing plan and related activities in close liaison with stevedore and storage providers.

5.12 Set and review charges and pricing

Pricing Strategy

It is suggested that the best pricing strategy to adopt is a market based strategy. Understanding what the closest competition are charging and position relative to them and price with an understanding of the overall cost of bringing ships to Perth.

Positives: Reduced road miles – quicker turnaround

Negatives: Accessibility to Perth, added costs at Dundee

The table below shows specimen costs broken down by Perth and Dundee costs for two different vessels and loads.

Table: Dues at Perth and Dundee

Port	Costs			
	Vessel A		Vessel B	
Perth costs	1,727	45%	2,215	35%
Dundee costs	2,152	55%	4,042	65%
Total to Perth	3,879	100%	6,257	100%

Table : Predicted comparative dues for other ports

Port	Costs	
	Vessel A	Vessel B
Montrose	1,524	2,150
Inverkeithing	3,550	4,537

As such a mid-market pricing strategy is acceptable and regular scanning of the competition is advised. However, 'actual' pricing information will be valuable if available as competitors may be using dynamic pricing. Good relationships with ships agents will allow this.

Table – Price comparison

Price analysis	Per tonne (2021/22)	Per tonne	Per tonne
Harbour/berthing	Perth	Inverness	Montrose
Dry cargoes	38p	62p	£592.36 (0-1000 tonnes) £1,1131.16 (1-2,000t) £1,669.95 (2-3,000t)
Buoy dues	38p	-	-
Shore dues			
Cement	69p	67p	96p
Grains and cereals	74p	68p	78p
Timber	70p	62p/m3	78p
Animal Feed	72p	-	50p
Sand and gravel	60p	67p	62p
General cargo	74p	1.01p	-
Ores	63p	73p	85p
Water charges	£2/m ³ (£50 min.)	3.23/tonne (£57.04 min.)	£3/tonne (£50 min.)

Price flexibility

It is not necessary to use a 'cost plus' pricing strategy as the cost of sale is minimal, most costs being fixed. As such commercial negotiations showing good awareness of the market and demand could include discounts and other incentives to stimulate demand. This has been used previously with some success but possibly not as part of a wider pricing plan.

Effective charging

Any pricing strategy has to be used within an effective and comprehensive revenue collection system i.e. all dues must be collected for storage, water and waste. If not this is a further discount on any other dues. It would be acceptable to discount on these extras but it must be done in a strategic way and relate to the core pricing strategy and the 'total value per ship' figure.

Dundee Charging

Pricing is also impacted by Dundee charging.

Schedule of charges

The schedule of charges are reviewed annually by the Harbour Board and recommended to the Council for consideration.

A schedule of charges is approved every year. Charges were slightly increased in 2021/22 to in line with inflation, but also to maintain a competitive advantage (no increase since 2016/17, slight increase in 2020/21). It is proposed to slightly increase charges and align other charges with other market comparator prices.

Action: PKC will set the schedule of charges annually. The schedule of charges for 2021/22 is attached in Appendix 3.

It is important to note that price is not the only deciding factor as quality of service and safety are also key elements. Moreover, carbon emission could also be a factor in customers' decisions. Shipping by road would emit 5 times more than water shipping per kgs/ton-mile (Emission Factors for Greenhouse Gas Inventories 2020 – US EPA).

As an illustration, a cargo of 1,000t of fishmeal being transported by sea from the Ijmuiden (Netherlands) to Perth would emit 18t (440 miles x 0.0409 kgs/ton-mile) compared to 137t (658 miles x 0.209 kgs/ton-mile) by road. This would be 7.5 times less emission.

PKC set the charges for harbour dues, but does not control stevedoring or storage charges.

Action: PKC will discuss stevedoring or storage charges with stevedore and storage providers by October 2021.

5.13 Maintain and improve customers' services and engagement

Regular liaison with customers and port users regarding operations and development is important. It is planned to monitor communication with customers and users. However, there is not a single point of contact for customers and to agree an integrated package.

Action: PKC with Calmac Ferries Ltd will organise at least an annual event for all river users and at least 2 events with harbour users.

5.14 Develop community benefits

Both PKC and Calmac Ferries Ltd are committed to secure Community Benefits from the contract and develop activities to benefit the community, SMEs and local people and help transform the community in a real and sustainable manner.

Our commitments include the following items:

- Employability workshop or event in a school, college or community group (employability session, career information, mock interviews)
- Work experience opportunities
- Training sessions for Council's apprentices (or other nominated representatives) on use of products or relevant health and safety courses.
- Donation of materials to support a community project.
- Donation of end of life products
- Recruitment of a modern (or other approved) apprentice and subject to recruitment needs.

Calmac launched the Perth Harbour Community Fund in May 2021 and the [Perth Harbour Community Fund Awards](#) have been announced.

Action: PKC with Calmac Ferries Ltd will maximise community benefits by promoting Perth Harbour Community Fund and developing other educational or employment initiatives.

5.15 Develop Harbour Storage and capacity

The availability of laydown space and storage under direct harbour control to facilitate the smooth import and export of goods is a vital element of a competitive commercial package. Some of the additional cargo trade is dependent on the provision of storage. However, existing private storage is not always readily available, and when available would command a premium rate. A draft masterplan has been developed to identify a 'Harbour Support Zone' around the Harbour Operations Area which could support harbour activities by providing storage now or in the future. It is important to note that the Support Zone should be close enough to the berths with easy stevedoring access to avoid as far as possible double handling.

Appendix 1A details the Perth Harbour Operations Area. Appendix 1B details the proposed Perth Harbour Support Zone.

Here are the options which have been identified in relation to storage and which have been classified under 2 categories:

Options not requiring further investment

- Option 1: Business as usual

There is a limited laydown area which is temporarily use for stockage

Strengths: no financial implication

Weaknesses: lack of ability to propose commercial package, lack of harbour's direct control on covered storage

Opportunities: existing quay use

Threats: reduction of shipping, loss of contracts, declining market trends, business closure.

- **Option 2: Entering into an agreement with stevedores and/or storage providers**

This would mean agreeing with stevedores and/or storage providers an integrated product offer including harbour operations, stevedore and storage services with possibly one single point of contact. This could include long term lease on specific assets to support package.

Strengths: no financial implication, ability to propose integrated commercial package

Weaknesses: lack of partner to engage with,

Opportunities: existing storage capacity, additional private investment in storage

Threats: dominant position if not balanced, price too high, loss of contract, business closure.

Options requiring further investment

- **Option 3: Covered storage at Berth 1**

This would create a semi-permanent structure offering covered storage (circa 500sqm) next to Berth 1 under Harbour's direct control. This area has already been used to temporarily store material (e.g. aggregate, baryte). The laydown space could be used to store material not sensitive to weather conditions (e.g. aggregate, baryte) while the semi-covered storage would be used to store material sensitive to weather conditions. The additional financial benefit is that this can go some way to maintaining existing customers (e.g. baryte) or attracting new customers or other use as part of a commercial package. A recent survey indicates that a 5m clearance from the edge of the quay must be maintained due to limited bearing capacity.

Strengths: ability to propose commercial package, additional flexibility in cargo handling and storing, asset could be moved or sold if not needed, allowed under Permitted Development

Weaknesses: limited covered storage, storage not immediately available, bearing capacity

Opportunities: sustain existing and attract some new shipping, new contracts

Threats: declining market trends, reduction of shipping, lack of users

- **Option 4: Open storage at end store site**

This would create a laydown open storage area at end store site. The demolition of the former Harbour End Store was completed in August 2015, with the site fenced off and secured. During the demolition a 3 metre void was discovered under the building and the site is currently unusable for laydown storage without further works being undertaken. It has been confirmed that prior to any works being carried out, to level off of the demolition site, some civil engineering input and possibly radar survey to inspect possible voids / ground conditions, would be required. Superficial work would then be required to form a concrete apron at one of the flood gate access points and then a layer of blinded and compacted hard-core, properly rolled to form a suitable surface. The End store land is under Perth Common Good Fund. However, Perth Common Good Fund agreed on 22 June 2016 to designate the End store land as a Council operational site for use solely for harbour related activities with the Harbour budget bearing the risks and rewards of ownership.

Strengths: ability to propose commercial package, additional flexibility in cargo handling and storing, good storage capacity

Weaknesses: storage not immediately available, end store site constraints leading higher financial ask, no covered storage

Opportunities: sustain existing and attract some new shipping, new contracts

Threats: declining market trends, reduction of shipping, lack of users, long term impact of water ingress

- **Option 5: Covered storage at Berth 1 + open storage at end store site**

This would create a covered storage (circa 500sqm) next to Berth 1 under Harbour's direct control and a laydown open storage area at end store site.

Weaknesses: storage not immediately available, end store site constraints leading to higher financial ask

Opportunities: sustain existing and attract some new shipping, new contracts

Threats: declining market trends, reduction of shipping, lack of users, may not be allowed under Permitted Development with a need of planning permission, longer impact of water ingress.

Options 3, 4 and 5 are constrained by the nature of ground and bearing capacity.

- **Option 6: Acquisition/lease of existing warehouse or open storage in the proposed 'Harbour Support Zone'.**

An existing warehouse could be purchased/leased next to Harbour Operations Area. Some warehouses adjacent to harbour operations could be vacant or under-utilised. The covered storage would be used to store material sensitive to weather conditions. The additional financial benefit is that this can go some way to maintaining existing customers or attracting new customers.

Strengths: immediate availability of storage, ability to propose commercial package, additional flexibility in cargo handling and storing

Weaknesses: medium to high financial implication with negotiations, limited covered storage, lack of availability

Opportunities: sustain existing and attract new shipping, new contracts

Threats: declining market trends, reduction of shipping, lack of users, lengthy negotiations

In addition to demonstrating best value, all options requiring further capital investment would have to generate sufficient income to cover loan charges to avoid any pressure on the Council's revenue budget.

The different options have been assessed using the following Critical Success Factors:

Critical Success Factors	Description
CSF1 – Strategic fit and business needs	How well the option meets the agreed spending objectives, related business needs and service requirements
CSF2 – Potential Value for money	How well the option optimises public value (social, economic and environmental), in terms of the potential costs, benefits and risks
CSF3 – Supplier capacity and capability	How well the option matches the ability of potential suppliers to deliver the required services, and is likely to be attractive to the supply side

CSF4 – Potential affordability	How well the option can be funded from available sources of finance
Critical Success Factors	Description
CSF5 – Potential achievability	How well the option is likely to be delivered given the organisation's ability to respond to the changes required, and matches the level of available skills required for successful delivery

Based on assessment, it was agreed to take forward options 2 and 6 as the preferred options to develop storage within the Harbour Support Zone during the period of the Business Plan. Option 2 will not require capital investment and we will therefore be pursued in the short term. Option 6 will require capital and/or revenue investment, but facilities exist therefore could be delivered in the short term if opportunities arise. Appendix 4 is presenting how Option 6 could work based on a real case scenario for the lease of a storage facility and the implications for the Council.

Action: The Lead Council Officer will discuss with stevedores and/or storage providers an integrated product offer to be considered by the Board. If agreed by the Board and the Council, the Lead Council Officer will identify opportunities as they come to lease/acquire existing warehouse and/or open storage within the Harbour Support Zone (Option 6).

5.16 Maximise and increase tidal window opportunities

Perth Harbour is a tidal harbour which means that movements on the 22 mile navigation channel are restricted by the tides and the 4.2m draught. It has been calculated that with 365 high tides (2 x tides a day) per annum, the harbour is only accessible on 95 tides or on 26% of all the available tides. When this is compared to 22, the annual ship number for 2019 and assuming one ship movement per tide, it can be seen that only 23% of the available tides or 6% of all tides are being utilised.

4 options have been identified

- **Option 1: Business as usual**

No dredging maintenance is carried out.

Strengths: no financial implication

Weaknesses: reduced accessibility, lack of compliance with the Port Marine Safety Code (PMSC)

Opportunities: development of alternative river uses

Threats: grounding, reduction of shipping, temporary or permanent closure, environmental pressure, declining market trends, business closure

- **Option 2: Do minimum – maintenance dredging to 4.2m**

This would continue to allow vessels with draughts of up to 4.2m to navigate the upper Tay on Mean High Water Spring Tides.

Strengths: low financial implication, compliance with PMSC, high probability to secure Marine Scotland Licence

Weaknesses: no additional accessibility, do not meet request from some harbour customers

Opportunities: sustain existing and attract some new shipping

Threats: declining market trends, reduction of shipping

- **Option 3: Capital dredging to 4.5m**

A dredge which would allow vessels with a draft of up to 4.5 m to navigate the upper Tay on Mean High Water Spring Tides. A 4.5m dredge would increase tide availability from 26% to 42% (155 tides). The main part of the dredging would involve dredging in the main channel.

Strengths: compliance with PMSC, moderate additional accessibility, moderate market signal, partly meet request from some harbour customers

Weaknesses: moderate financial implication, limited additional accessibility, complex contract requiring some specialised contractors.

Opportunities: sustain existing and attract new shipping

Threats: declining market trends, reduction of shipping, moderate probability not to secure Marine Scotland Licence

- **Option 4: Capital dredging to 5m**

A dredge which would allow vessels with a draft of up to 5.0m to navigate the upper Tay on Mean High Water Spring Tides. A 5m dredge would increase tide availability from 26% to 72% (262 tides). The main part of the dredging would involve dredging in the main channel. In February 2018, soft market testing took place to assess the level of funding which would be needed for contract works for a '5 m Dredge'. It is estimated that the contract work costs would be in the region of £1m without costs for any specific constraints arising from stakeholders' consultation (e.g. methods of works for dredging over pipeline, ecological surveys).

Strengths: Significant additional accessibility, compliance with PMSC, fully meet request from some harbour customers

Weaknesses: High financial implication, highly complex contract requiring specialised contractors

Opportunities: sustain existing and attract new shipping

Threats: declining market trends, reduction of shipping, Marine Scotland licence not approved, no agreement with pipeline operators and Crown Estate.

- **Option 5: Redesign navigation channel**

The navigation channel would be re-designed to use data and tidal differently to increase tidal window and allow vessels with a bigger draft to navigate the upper Tay. Surveys have already being undertaken at Dundee Bridge and at certain points on the channel.

Strengths: Significant additional accessibility, compliance with PMSC, fully meet request from some harbour customers, moderate financial implication

Weaknesses: complex proposal to be accepted by regulators, users and pilots

Opportunities: sustain existing and attract new shipping

Threats: declining market trends, reduction of shipping.

The Harbour Board has agreed that Option 2 and/or Option 5 are the preferred options based on costs/benefits analysis. The current Harbour operator has indicated that tidal window could be increased by surveying existing channels and moving it when possible at a manageable cost.

Options 1, 3 and 5 are considered not sustainable or achievable.

Action: The Lead Council Officer with Calmac Ferries Ltd will implement Option 2 and when appropriate present proposals to progress Option 5 in order to maintain/increase tidal window using surveying.

6. Financial

6.1 Current position 2020/21

The steady decline in trade has obviously had a major impact on the Harbour's income and a consequential impact on the Council's revenue budget as expenditure exceeds income. Costs have conversely been rising. Table 1 provides details of past financial years.

Table 1: Historical figures

Financial Year	Gross Expenditure	Total Net Income	Deficit
2011/2012	£302k	£99k	£203k
2012/2013	£288k	£94k	£194k
2013/2014	£356k	£95k	£261k
2014/2015	£300k	£87k	£213k
2015/2016	£262k	£98k	£164k
2016/2017	£285k	£47k	£238k
2017/2018	£244k	£29k	£215k
2018/2019	£394k	£39k	£355k
2019/2020	£241k	£68k	£173k
2020/2021	£265k	£72k	£193k

2020/21: The increase in expenditure is mainly due to the set-up of pilotage services contract and pilot training.

21 ships used the harbour in 2020/21 (22 in 2019) with timber and fish meal imports with a total tonnage of over 24,000 tonnes (29,000 tonnes in 2019) and gross income of £61,600. Additional gross income came from the Fair Maid Tug charter to Montrose Port Authority totalling £60,000.

In addition, the amount of outstanding loan debt is £1,023,396 (31 March 2021). The harbour loan charges relate to the Harbour wall (borrowing over 30 years, with 12-14 years left), Harbour Development work in 2004-07 (borrowing over 30 years, with 14-16 years left) and the Harbour boat (borrowing over 20 years, with 6 years left). The

loan charges above are charged to the Corporate Loan Charges budget, and not directly to the Harbour.

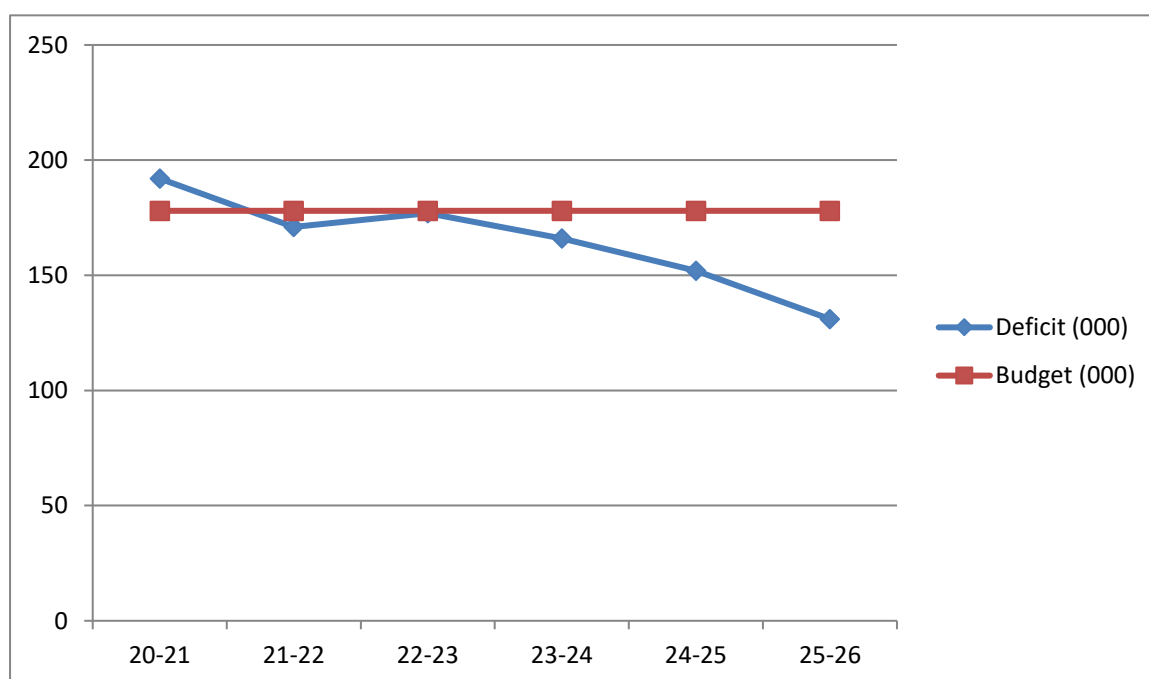
There is also a debt of £146,914 which covers the preparatory costs for securing capital dredging licence for which loan charges of £17,039 will be recharged to Harbour revenue budget in 2021-22.

The harbour budget figures above show an operating deficit of £192,500 which is £14,300 higher than the budgeted deficit of £178,200.

6.2 Financial Projections

An annual breakdown of income and expenditure is provided below as well as an a projection of deficit compared to budget. If the proposed targets are achieved the deficit could be reduced by 32% from 192k in 2020-21 to 131k in 2025-26. If this projected trend continues beyond the period of this Business Plan, a breakeven position could be achieved.

Projected deficit vs budget (5 years)



The financial projections are based on the following assumptions:

- 1% increase per year is added to harbour contract (operations)
- 3% increase per year is added to the following costs: Property & Insurance and Maintenance & Equipment.
- Harbour Contract (income share 50%) and Harbour Contract (admin. 10%) are based on agreed contract with harbour operator finishing in July 2023 with a possible extension of 2 years to July 2025.
- Pilotage Services charges are based on contract agreed with Perth Pilot Ltd and on estimated number of ships

- Maintenance dredging costs are annual set amounts and may vary depending on needs.
- Cargo income is based on proposed projected targets in tons translated into monetary value using schedule of charges and past income. It is assumed that the Schedule of charges would remain at the same level as 2021/22. A slight increase of charges may apply to reflect inflation. However, any increase would have to be in line with market conditions and competitors.
- Fair Maid chartering income is based on past income.
- Pilotage Services income is based on Pilot Services charges that the Council can recoup from shipping agents in line with the Schedule of charges.

5 Year estimated income and expenditure projections (2021-26)

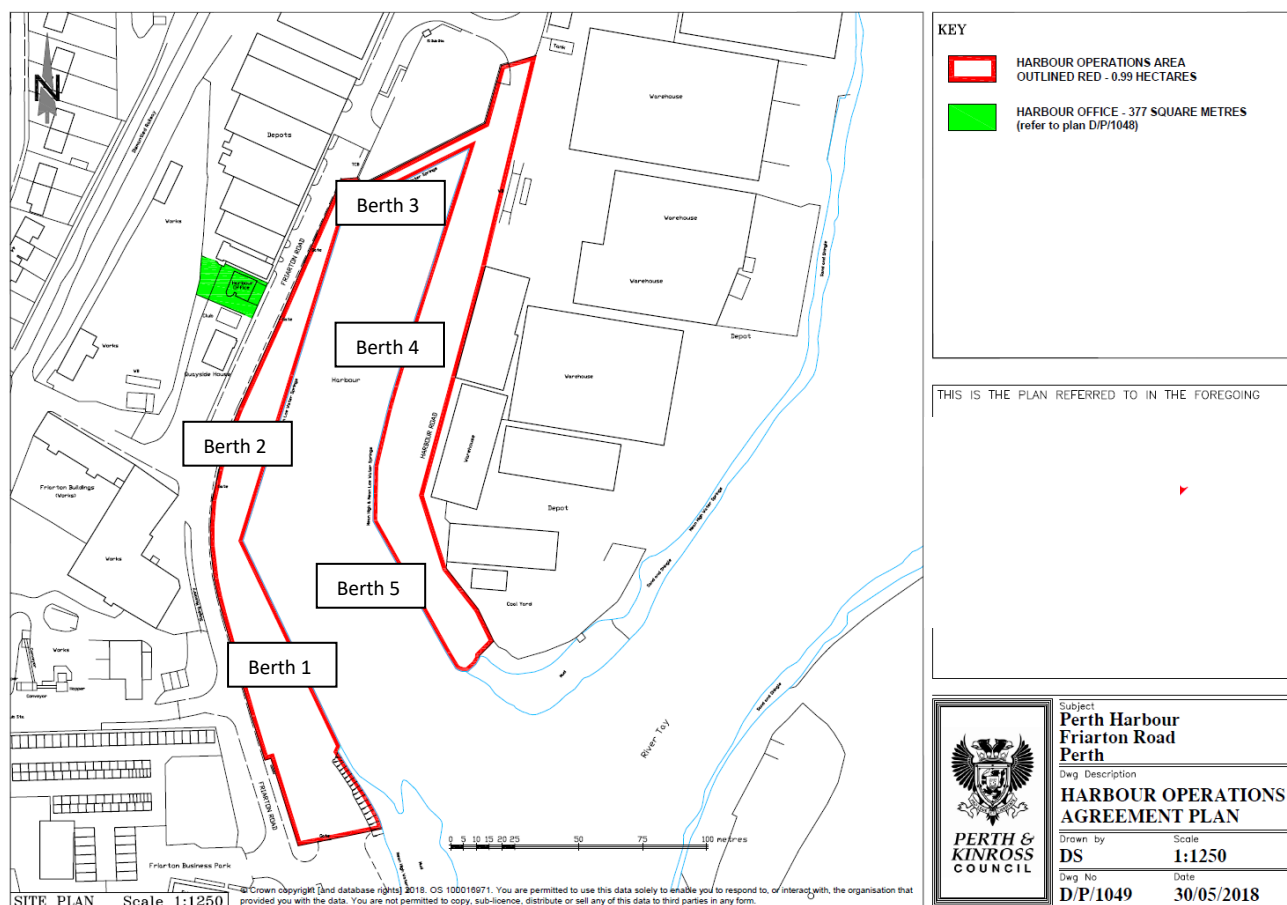
2021-22		2022-23		2023-24		2024-25		2025-26	
Expenditure	Amount	Expenditure	Amount	Expenditure	Amount	Expenditure	Amount	Expenditure	Amount
Harbour Contract (operations)	172,518	Harbour Contract (operations)	174,243	Harbour Contract (operations)	175,986	Harbour Contract (operations)	177,746	Harbour Contract (operations)	179,523
Harbour Contract (income share 50%)	70,505	Harbour Contract (income share 50%)	85,232	Harbour Contract (income share 50%)	104,050	Harbour Contract (income share 50%)	128,096	Harbour Contract (income share 50%)	158,823
Harbour Contract (admin.10%)	10,601	Harbour Contract (admin.10%)	13,546	Harbour Contract (admin.10%)	17,310	Harbour Contract (admin.10%)	22,119	Harbour Contract (admin.10%)	28,265
Property costs & insurance	41,050	Property costs & insurance	42,282	Property costs & insurance	43,551	Property costs & insurance	44,858	Property costs & insurance	46,204
Maintenance & Equipment	15,000	Maintenance & Equipment	15,450	Maintenance & Equipment	15,914	Maintenance & Equipment	16,391	Maintenance & Equipment	16,883
Governance & Compliance	4,000	Governance & Compliance	4,000	Governance & Compliance	4,000	Governance & Compliance	4,000	Governance & Compliance	4,000
Marketing & Membership	2,200	Marketing & Membership	2,200	Marketing & Membership	2,200	Marketing & Membership	2,200	Marketing & Membership	2,200
Pilotage Services charges	29,500	Pilotage Services charges	40,000	Pilotage Services charges	48,000	Pilotage Services charges	56,000	Pilotage Services charges	64,000
Total Operations	330,374	Total Operations	376,953	Total Operations	411,011	Total Operations	451,410	Total Operations	499,898
Maintenance dredging	10,000	Maintenance dredging	7,500	Maintenance dredging	7,500	Maintenance dredging	7,500	Maintenance dredging	7,500
Loan charges	17,000	Loan charges	17,000	Loan charges	17,000	Loan charges	17,000	Loan charges	17,000

Total	357,374	Total	401,453	Total	435,511	Total	475,910	Total	524,398
Income		Income		Income		Income		Income	
Cargo	106,000	Cargo	135,463	Cargo	173,099	Cargo	221,191	Cargo	282,646
Fair Maid Chartering	60,000	Fair Maid Chartering	60,000	Fair Maid Chartering	60,000	Fair Maid Chartering	60,000	Fair Maid Chartering	60,000
Sub-Total	166,000	Sub-Total	195,463	Sub-Total	233,099	Sub-Total	281,191	Sub-Total	342,646
Pilotage Services Income	19,200	Pilotage Services Income	27,600	Pilotage Services Income	34,000	Pilotage Services Income	40,400	Pilotage Services Income	46,800
Services to Mariners	1,000	Services to Mariners	1,000	Services to Mariners	2,000	Services to Mariners	2,000	Services to Mariners	4,000
Total	186,200	Total	224,063	Total	269,099	Total	323,591	Total	393,446
Surplus/Deficit	-171,174	Surplus/Deficit	-177,390	Surplus/Deficit	-166,412	Surplus/Deficit	-152,319	Surplus/Deficit	-130,952

7. APPENDIX

Appendix 1A: Plan of Perth Harbour Operations Area and Port limits

Perth Harbour operations area is detailed below:

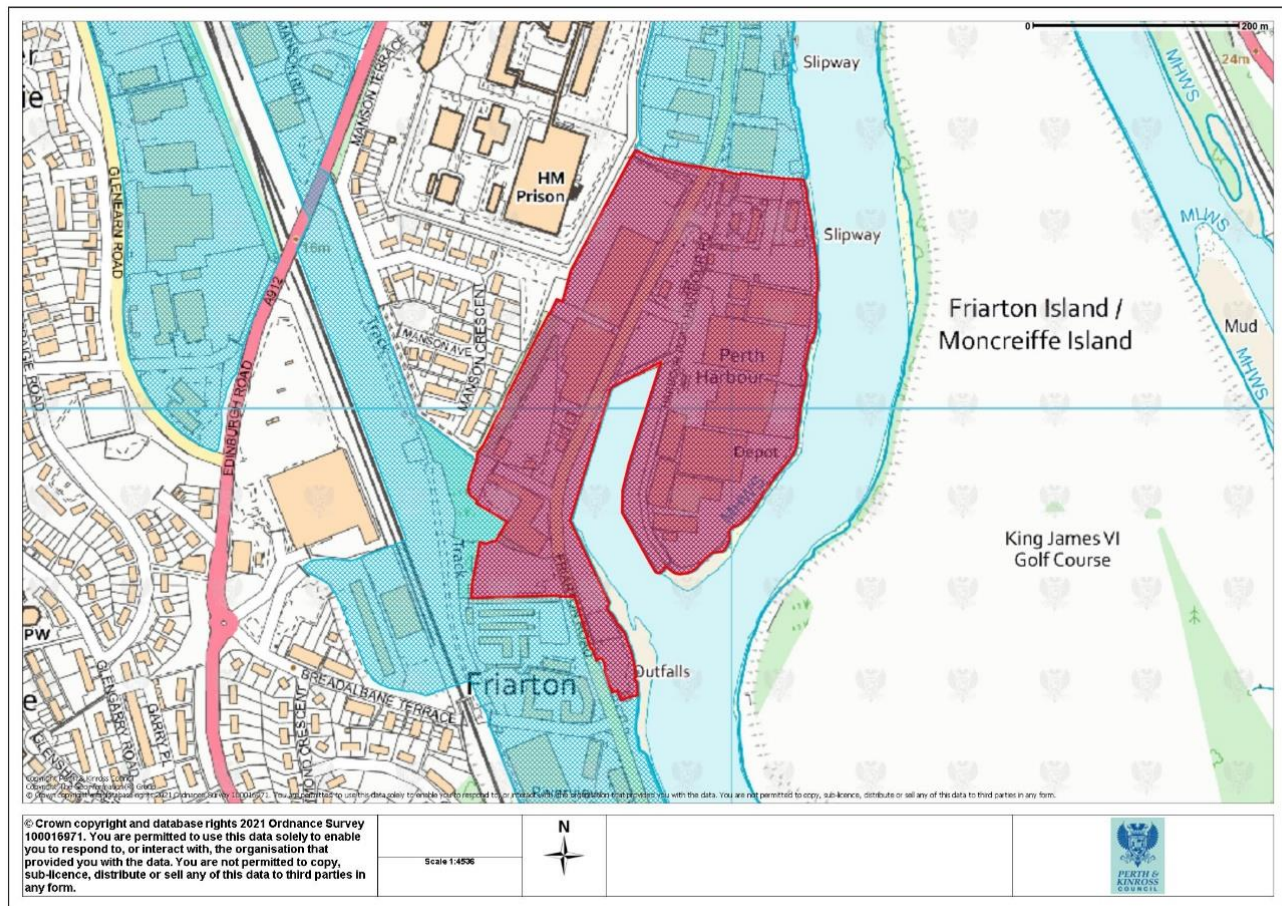


Port limits:

The Port limits within which the Council shall exercise jurisdiction as a harbour authority (including jurisdiction for the purposes of pilotage under Part I of the Pilotage Act 1987(5) and within which the powers of the harbour master shall be exercised shall be the area described in The Perth Harbour Revision Order 2007.

The 22 miles navigation channel lies within a line commencing at a point on the level of high water on the east bank of the eastern arm of the River Tay at the south east corner of Perth Railway Bridge to the east of the existing westernmost Dundee harbour limits.

Appendix 1B: Plan of Perth Proposed 'Harbour Support Zone'



Created by Serge Merone on 15 January 2021

Appendix 2: Summary of Relevant Legislation

The duties and powers of a harbour authority in relation to marine operations are of three types:

- Statutory duties imposed either in the local legislation for that authority or in general legislation,
- General common-law duties
- Fiduciary duties.

The documents listed below are referenced as part of Perth Harbour Safety Management System:

- a) Port Marine Safety Code (2016).
- b) Guide to Good Practice on Port Marine Operations (2018).
- c) Pilotage Act 1987.
- d) L 148 Safety in Docks – Approved Code of Practice.
- e) Dangerous Vessel Act 1985.
- f) Perth Harbour Acts and Orders 1856 to 2007.
- g) The Perth Harbour Revision Order 2007.
- h) National Occupational Standards for Port Personnel:
 - (i) Marine Pilotage;
 - (ii) Marine Operations (Ports);
 - (iii) Stevedoring.
- i) MCA Code of Practice on the Safety of Small Workboats & Pilot Boats.
- j) Northern Lighthouse Board document “Instructions on the Provision and Maintenance of Aids to Navigation”.

Appendix 3: Schedule of charges 2021/2022

Schedule A

Rates and Duties Leviable on Vessels at the Port and Harbour of Perth

Harbour Dues	2020	2021 (per Gross Tonne)
All vessels to or from all destinations <u>out with</u> the precincts of the River Tay	37p	38p
All vessels <u>employed in</u> the River Tay carrying goods and entering the precincts of the Port of Perth	31p	32p
All vessels employed in the River Tay only and <u>carrying passengers</u> (>12 passengers) and their luggage exclusively	37p	39p

Conservancy Dues	2020	2021 (per Gross Tonne)
Buoy dues on all vessels to or from any Port or <u>beyond</u> the River Tay in ballast or laden.	37p	38p
Buoy dues on all vessels to or from any Port or place <u>within</u> the River Tay	31p	32p

Notes:

- a) It shall be in the option of Perth and Kinross Council to charge the above dues on the voyage inwards or outwards at the rates specified.

Schedule B
**Rates and Duties Leviable on Commodities at the Port and Harbour of
 Perth – Imported or Exported**

Commodity	2020	2021
All animal feed stuffs	71p	72p
Cement	68p	69p
Coal, coke and patent fuels	69p	70p
Corn and cereals	73p	74p
Chemicals	74p	75p
Fertilisers	74p	75p
General Cargo	73p	74p
Metals – iron and steel	72p	73p
Metals – scrap	67p	68p
Marble and granite chips	62p	63p
Ores, crude materials including barytes and road salt	62p	63p
Paper pulp and newsprint	73p	74p
Potatoes, onions and other vegetables	60p	61p
Timber and all Forest Products	69p	70p
Timber – Softwood for pulping	65p	66p

Notes:

- a) All other commodities, goods and articles not specified above, shall be chargeable in proportion to other goods of similar bulk and value.
- b) The Tonne designated above is the tonne of 1,000kgs or, in cases where weight cannot be established, of 40 cubic feet.

Schedule C

**Sundry Charges Leviable on Vessels and in Respect of Services
Provided at the Port and Harbour of Perth**

Services	2020	2021
1. <u>Water Charge</u> a) Charge for supplying fresh water to vessels b) Charge for water equipment miss use and/or non-return	a) £2 per cu.m. <u>Minimum Charge £40</u> b) £50.00	a) £2 per cu.m. <u>Minimum Charge £40</u> b) £50.00
2. <u>ISPS Charge</u> a) Implementation of ISPS (temporary restricted area) b) ISPS administration charge (all ISPS vessels)	a) £75 b) £25	a) £75 b) £25
3. <u>Waste Charge</u> a) General Waste b) Special Waste (oil, filters, paint) c) Food Waste	a) £30 per vessel call b) Full recovery plus 10% c) Full recovery plus 10%	a) £40 per vessel call b) Full recovery plus 10% c) Full recovery plus 10%
4. Harbour charge on the delivery of gas, oil or any other type of fuel for the propulsion of the vessel.	65p per cu.m.	65p per cu.m.
5. Charge for berthage of any vessel in the Harbour remaining beyond a period of 24 hours after completing discharge, permission for such berthage being at the sole discretion of the Harbour Master.	£1.05 per gross tonne per week or part thereof	£1.50 per gross tonne per week or part thereof
6. Charge for berthage of vessels laid up within the Harbour precincts, permission being at the sole discretion of the Harbour Master.	£1.05 per gross tonne per week or part thereof	£1.50 per gross tonne per week or part thereof
7. Charge for quay storage, permission for such storage being at the sole discretion of the Harbour Master	Price on Application (Harbour Master)	Price on Application
8. Washing of quays	£20 per hour + water rate (see 1a above)	£20 per hour + water rate (see 1a above)
9. a) Passenger boarding/disembarking within the Perth Harbour jurisdiction b) Passenger safety & security charge	a) £0.50 per person b) Full recovery plus 10 % administration charge	a) £0.50 per person b) Full recovery plus 10 % administration charge

10.a) Boatman/mooring charge 0800 Monday to 1800 Friday b) Boatman/mooring charge 1800 Friday to 0800 Monday	a) £25 per boatman <i>(arrival two / departure one)</i> b) £35 per boatman <i>(arrival two / departure one)</i>	a) £30 per boatman b) £40 per boatman <i>(min charge two boatman)</i>
11.a) Tug Assistance for berthing (at discretion of Pilot or Harbour Master) (compulsory for vessels over 90m in length) b) Tug Assistance - Emergency Call Out <i>(restricted availability)</i>	a) £200 per movement b) £1000 per movement	a) £950 per movement b) £2000 per movement
12. Overnight Laydown of vehicles on site (Traffic Management)	Price on Application (Harbour Master)	Price on Application
13. Staffing (Harbours) per hour – Consultation/Project Fee	£35 per hour	Pier Hand - £27.2/h Supervisor - £37.16/h Manager - £50.68/h

Schedule D

Charges for Registered Passenger Vessels carrying less than 12 passengers at the Port and Harbour of Perth

Composite Rate – includes berthing dues, passenger/crew dues, landing dues, bunker delivery (does NOT include the cost of bunkers) and water dues, where available.

Additional charges for goods and materials either shipped or landed will be payable under Schedule C of the PKC Schedule of Charges.

The composite rates will only be granted subject to the following conditions:

- The vessel must be a registered and licenced passenger vessel;
- Proof of vessel insurance must be produced prior to granting of a composite rate;
- A composite rate will not be agreed where there are outstanding sums due to PKC out with normal settlement terms or where a vessel has regularly been in arrears during the previous 12 months;
- Composite tickets must be purchased in advance and are non-refundable;
- Charges will be due for payment in full at the commencement of the composite berthing period.
- Owners changing vessels part way through the season will be charged at a pro rata rate for the appropriate periods for each vessel;
- Part refunds will not be given for early departure from any facility.

Charges are based on length of vessel as detailed below -

Vessel length	Per Call	1 month	6 months	12 months	2021
0m – 9.9m	£15.93	£19.99	£86.63	£133.28	133.28
10m - 12.5m	£18.63	£25.61	£110.99	£170.75	170.75

Further details on composite tickets can be obtained from the Harbour Office.

Schedule E

Charges for Pilotage services engaged at the Port of Perth

Pursuant to Section 10 of the Pilotage Act 1987, Perth and Kinross Council as CHA for the Compulsory Pilotage Area hereby make the following list of pilotage charges:

Pilot charge Length Overall (L.O.A) <i>(charge per act)</i>	£5.05 per metre
Transport charges <i>(charged per act)</i>	£50.00
Late cancellation	
within 3 hours of advised Perth Pilot Boarding Time	100% of charge
within 12 hours (arrival only) on advised Perth Pilot boarding time	50% of charge
Detention on board <i>(per hour or part thereof)</i>	£45 per hour
Berth Shift within the Port	75% of length charge + Expenses

Appendix 4: Storage Case scenario – Acquisition/Lease of existing warehouse and/or open storage within the Harbour Support Zone.

Objective:

PKC and Harbour operator have access to and control of covered storage and/or open storage to offer an integrated product and attract more cargos.

Needs:

The targeted cargos are timber (finished, wood pellets), aggregates, baryte, possibly waste (SRD/RDF) and other inert cargo (e.g. equipment). These cargos have some storage requirements which may include for example; dry (closed) storage, avoiding wetting during handling and carriage and avoiding contamination.

Each storage will have its own stowage factor. We have selected 1,5 m³/t as a reference. Based on an average cargo of 1,100 tons, the average space needed for 1 cargo would then be 1,650m³ (58,200ft³ – 1,500 sqft). A cargo of 1,100 tons brings on average £1,100 in harbour dues.

As a minimum, a covered area of 6,000 sqft would be needed to accommodate 4 cargos at any time. Although cross-contamination between cargo and stevedoring requirements may be an issue and may reduce space available. This could be complemented by an open storage area to offer more flexibility and address possible issues between cargos.

Existing offering in Harbour Support Zone:

A first opportunity to access and control a covered storage (warehouse) of 17,850 sqft with an open storage compound of 7,500 sqft. This would allow a maximum of 11 cargos to be stored under cover and 5 cargos to be stored outside. Access to compound via warehouse. On average, it is estimated that 7 cargos under cover and 3 cargos outside could be accommodated at anytime.

A second opportunity to access and control a covered storage (warehouse) of 14,450 sqft with or without an open storage compound of 7,500 sqft. This would allow a maximum of 9 cargos to be stored under cover and 5 cargos to be stored outside. Access to compound via warehouse. On average, it is estimated that 6 cargos under cover and 3 cargos outside could be accommodated at anytime.

Terms and conditions:

Long term lease of at least 10 years with break option 5 years and rent reviews after 5 years.

A full repairing and insuring lease

Condition survey/ schedule of condition of the building at entry

Possible costs to split buildings

Financial:

Estimated income and costs for both opportunities are detailed below:

Storage opportunities in Sqft	6,000	17,850 + 7,500 (average)	14,450 + 7,500 (average)	14,450 + 7,500 (max)	14,450 (max)
Estimated income	£18,250 (£8,800 + £9,450)	£45,625 (£22,000 + £23,625)	£41,062.50 (£19,800 + £21,262.50)	£63,875 (£30,800 + £33,075)	£41,062.50 (£19,800 + £21,262.50)
Additional dues	4 cargos of 1,100t* x £4,400 = £17,600 gross (£8,800 net income)	10 cargos of 1,100t* x £4,400 = £44,000 gross (£22,000 net income)	9 cargos of 1,100t* x £4,400 = £39,600 gross (£19,800 net income)	14 cargos of 1,100t* x £4,400 = £61,600 gross (£30,800 net income)	9 cargos of 1,100t* x £4,400 = £39,600 gross (£19,800 net income)
Storage charges	4 cargos of 1,100t = 6,000sqft x £2.25 per sqft = £13,500 x 0.7 (void 30%) = £9,450 (£4,725 net income if shared)	10 cargos of £1,100t = 15,000sqft x £2.25 per sqft = £33,750 x 0.7 (void 30%) = £23,625 (£11,812.50 net income if shared)	9 cargos of £1,100t = 13,500sqft x £2.25 per sqft = £30,375 x 0.7 (void 30%) = £21,262.50 (£10,631.25 net income if shared)	14 cargos of £1,100t = 21,000sqft x £2.25 per sqft = £47,250 x 0.7 (void 30%) = £33,075 (£16,537.50 net income if shared)	9 cargos of £1,100t = 13,500sqft x £2.25 per sqft = £30,375 x 0.7 (void 30%) = £21,262.50 (£10,631.25 net income if shared)
Annual estimated costs	£16,200	£68,445	£59,265	£59,265	£39,015
	£13,500 (£2.25 per sqft) (rent) + 20% other costs (management, maintenance/repairs, insurance, utilities): £16,200	£57,037.50 (£2.25 per sqft) (rent) + 20% other costs (management, maintenance/repairs, insurance, utilities): £68,445	£49,387.50 (£2.25 per sqft) (rent) + 20% other costs (management, maintenance/repairs, insurance, utilities): £59,265	£49,387.50 (£2.25 per sqft) (rent) + 20% other costs (management, maintenance/repairs, insurance, utilities): £59,265	£32,512.50 (£2.25 per sqft) (rent) + 20% other costs (management, maintenance/repairs, insurance, utilities): £39,015
Surplus(Deficit)	£2,050	(£22,820)	(£18,202.50)	£4,610	£2,047.50 (preferred)

*10% below cargo average which is at 1,200t.

Preferred opportunity:

- Long term lease to reduce costs, increase certainty and ability to negotiate to attract cargos. Short term lease will increase costs significantly with little added-value.
- Although the preferred opportunity is offering space is beyond existing needs (more than 2 times the minimum required), it would offer flexibility to grow and attract new cargos. The gap between costs and expenditure for a space of 6,000 sqft and a space of 14,450 sqft would be similar as although costs would reduce, income would also reduce.
- Additional expenditure will have to be balanced by additional harbour dues and storage charges.
- Storage charges not be shared with Calmac. Storage management costs would have to be negotiated separately
- Attracting a minimum of 9 additional cargos
- Storage charges for cargo should not go below storage charges for rent. However, charges may need to be reduced to offer a competitive and integrated package.
- Risk of increasing deficit if number of cargos, storage charges and occupancies are not achieved.

Reference: CargoHandbook.com [https://www.cargohandbook.com/Welcome to CargoHandbook](https://www.cargohandbook.com/Welcome_to_CargoHandbook)

- Timber- stowage factor: varied 1,5 m³/t (wood pellets)
- Aggregates (lightweight)– stowage factor: 1,4 m³/t
- Baryte – stowage factor: 0,82 m³/t
- Soda Ash - stowage factor: 0,95 to 1,67 m³/t