ABSTRACT
This Report details ongoing operations at the Harbour since the previous meeting of the Arbroath Harbour Joint Consultative Committee (AHJCC), outlines plans for future programmes of works, and discusses contemporary matters of relevance to harbour activities.

1 RECOMMENDATION
1.1 It is recommended that the Committee agree to note and approve the contents of this Report.

2 ADMINISTRATIVE MATTERS
2.1 Financial Update to end of March 2008
2.1.1 The unaudited financial statement for the period up to the end of March 2008 is attached as Appendix 1 to this report. Appendix 1 identifies a small overspend of £10,126, which will be contained within the overall Roads Division 2007/08 revenue budget.

2.2 Port Marine Safety Code
2.2.1 Reference to item 2.1 (b) of the Minute of the Meeting of this Committee on 23 November 2007 the Committee agreed to defer the next safety audit on the basis that the hazards which remain outstanding are being addressed as part of the various programmes of works currently in progress in the harbour. The environmental improvements are still ongoing and it is recommended that a full inspection be undertaken when they are finished in summer 2008. A partial inspection was undertaken after the severe winter storm and the results of that inspection are detailed in Appendix 2.

2.3 Revision of Harbour Charges - Biennial Review of Charges for Implementation in April 2009
2.3.1 With reference to item 2.1 (c) of the Minute of the Meeting of this Committee on 23 November 2007, proposed revisions (as changed in view of comments from users), were approved by the Infrastructure Services Committee and have been implemented firstly in April 2007 and then again in April 2008. The next biennial review will be undertaken in autumn 2008 for implementation in April 2009.

2.4 Oil Spill Contingency Planning and Response
2.4.1 With reference to item 2.1 (d) of the Minute of the Meeting of this Committee on 23 November 2007, there have been no further significant pollution incidents in the harbour in the intervening period.
2.4.2 The Council continues to retain the services of a specialist contractor to deal with higher-level pollution incidents should they occur.

2.4.3 The currency of the oil spill contingency plan had come to an end in 2007 and the plan was updated after consultation with the AFA. A copy of the plan is available for inspection in the Harbour Master’s office.

2.4.4 Harbour staff have received further training in dealing with oil spills over April and May 2008.

2.5 Control of Tri-Organo Tins (TOT's)

2.5.1 With reference to item 2.1 (e) of the Minute of the Meeting of this Committee on 23 November 2007, in all the tests to date on the wash down waters from the recycling system at the slipway the levels have been acceptably low. Results from recent sampling are attached in Appendix 3.

2.6 Scottish Ports Meeting

2.6.1 With reference to item 2.1 (f) of the Minute of the Meeting of this Committee on 23 November 2007, the minutes of the most recent meetings at Peterhead in February 2007 are available for inspection by the members of this Sub-Committee in the Harbour office.

2.6.2 The Harbour Master and a design engineer from Roads attended this meeting and also visited harbour facilities in the vicinity, particularly to assess the suitability of slipway cradles which had been replaced at Macduff Harbour for use at Arbroath and marina facilities in the area - these issues are discussed in later items.

2.6.3 The next meeting is on 26 June 2008, to be hosted by Lerwick but the agenda has not yet been received. The agenda will be made available to members on receipt.

2.7 Arbroath SEAFEST

2.7.1 With reference to item 2.1 (g) of the Minute of the Meeting of this Committee on 23 November 2007, regarding the Arbroath SEAFEST, the harbour master has attended planning meetings for this year’s event, which is scheduled for 16 and 17 August 2008.

2.8 Maritime and Coastguard Agency (MCA) - Forth to Border and Tayside/North Fife Sub Committee

2.8.1 With reference to item 2.1 (h) of the Minute of the Meeting of this Committee on 23 November 2007, the Harbour Master is enquiring if the next meeting due in September 2008 will be held and will attend.

2.9 Organisational Changes

2.9.1 With reference to item 2.1 (i) of the Minute of the Meeting of this Committee on 23 November 2007, a new harbour assistant has been appointed to replace the previous assistant who recently resigned his position.
ENGINEERING MATTERS

3.1 Replacement of Inner Harbour Gates

3.1.1 With reference to item 2.2 (a) of the Minute of the Meeting of this Committee on 23 November 2007, there has been one occasion on 8 April 2008 when gates were fouled by a large piece of debris possibly brought into the harbour by recent storms causing a severe leakage of water from the Inner Harbour. Staff tied up some boats on the pontoons and divers removed the debris. The gates have been operating satisfactorily since.

3.1.2 The opening and closing times of the gates have recently moved to the summer schedule and opening and closing times are routinely posted outside the Harbourmaster’s office and on the security gate leading on to the pontoons, generally one month in advance. As requested by the Arbroath Sailing and Boating Club opening times for the whole summer season have been produced and given to the club. The schedule is available on request.

3.1.3 With reference to item 6 (d) of the Minute of the Meeting of this Committee on 23 November 2007, the Head of Roads has considered the request for extended opening of the gates but for previously stated grounds of costs and health and safety of staff undertaking their duties does not recommend alteration of the staff rota in the summer months. Also as stated previously consideration will be given to one off arrangements to have the gates opened earlier or later for special events subject to suitable notice and staff availability.

3.2 Pontoon Berths

3.2.1 As previously reported in item 2.2 (b) of the Minute of the Meeting of this Committee on 23 November 2007, the pontoon berths continue to be well used with a high occupancy.

3.2.2 Overall numbers on the waiting list remain high.

Infrastructure Repairs and Maintenance

3.3 West Breakwater repairs

3.3.1 With reference to item 2.2 (e) of the Minute of the Meeting of this Committee on 23 November 2007 the examination of a number of structures has taken place. The consultant has identified repairs which require to be done as soon as possible on the west breakwater and the ballast pier, and work has been undertaken during the series of low tides this winter. The report has also identified further work on the main breakwaters and consideration is being given to a programme of works over the next few years subject to allocating funding, (See item 4 below).

3.4 Structural Works in Inner and Outer Harbour

3.4.1 With reference to item 2.2 (f) of the Minute of the Meeting of this Committee on 23 November 2007 the examination of structures also identified further work on the other structures in the harbour including the need to protect against low water corrosion on several areas of sheet piles. A programme of works over the next few years is being considered subject to securing funding, (see item 4 below).
3.5 Maintenance Dredging Operations

3.5.1 With reference to item 2.2 (g) of the Minute of the Meeting of this Committee on 23 November 2007, further to a report made to Infrastructure Services Committee the contract for dredging is to be extended for a further period up to a maximum of three years. Early discussions with the contractor, Moray Council, indicate operations this year will take place in late summer. Again areas identified by the Harbour Master in conjunction with the harbour users will be targeted in these operations.

3.6 Ladders and Handrails

3.6.1 With reference to item 2.2 (h) of the Minute of this Committee on 23 November 2007 a phased programme of installing handrails and repairs to steps has been in progress over the past year. Handrails and steps have been visually inspected by harbour staff and when considered necessary have been replaced. This work has been done from September 2007 through to April 2008. Unfortunately a handrail failed while in use recently. Accordingly all the handrails in the outer harbour have been inspected by a blacksmith who has reported on their condition and given recommendations for action. This includes immediate replacement of a number of handrails and a priority list for the others. This work has been instructed. Inspection of the ladders in the outer harbour is also underway with a view to prioritising renewals. Further funding is available for this work in 2008-2009 through the Roads and Transport Renewals and Repairs Fund.

3.7 Refurbishment of Harbour Area

3.7.1 With reference to item 2.2 (j) of the Minute of the Meeting of this Committee on 23 November 2007, phase 1 of the environmental enhancement works commenced on site in March 2007 and were completed in August 2007. Phase 2 of the works started in October 2007 and were due for completion by March 2008. However a combination of unused contingency sums and additional funding has been made available for additional works in the area. This includes items which had been deleted from the main contract, including replacement of walls, railings and seating areas around the car park. These additional works will be deferred until after the summer season and will be on site from October to December 2008.

4 FUTURE PROGRAMME OF WORKS

4.1 With reference to item 4 (a) of the Minute of the Meeting of this Committee on 23 November 2007, and as noted above, a programme following on from the examination of structures in the harbour is under consideration. Report 408/08 was presented to the Infrastructure Services Committee on 22 April 2008 on the potential future programme of works in the harbour. The committee instructed officers to investigate funding for the work. The programme is detailed below.

4.2 Infrastructure Repairs

4.2.1 Low Water Corrosion

The recent structural survey report on the structures within the harbour carried out on behalf of the council has identified a requirement to protect against Accelerated Low Water Corrosion (ALWC) on several areas of sheet piles within the harbour. In the last decade the phenomenon of ALWC, a form of corrosion resulting from microbial activity, has become a major issue in respect of the durability of steel infrastructure in
seawater especially in the tidal zone. Consideration is being given to a programme of works over the next two years subject to securing funding.

4.2.2 West Breakwater And Other Masonry Repairs

The structural report also identified masonry repairs, which require to be done as soon as possible on the west breakwater and the ballast pier, and some repair work has been in progress during the series of low tides this winter. The report has also identified further work on the west breakwater and outer harbour walls and consideration is being given to a programme of works to be implemented over the next two to five years.

4.2.3 Flood Prevention

During the recent storms at the beginning of March, which coincided with very high water levels, several areas of surfaces were damaged including the area around the Sail Cloth store. Low cost measures to prevent flooding from reaching this area are being considered. As discussed at the last meeting a proposal to replace a section of wall with an open railing at the parapet of the bridge is being prepared for discussion with SEPA.

4.3 Fuel dispensing facilities and storage compounds

4.3.1 With reference to item 6 (b) and (c) of the Minute of the Meeting of this Committee on 23 November 2007, the Water Environment (Oil Storage) (Scotland) Regulations 2006 were made under sections 20 and 36(2) and (3), and Schedule 2 of The Water Environment and Water Services (Scotland) Act 2003 and were enacted on 1 April 2006. The intention of the 'Regulations' is to make provision for regulating oil storage activities for the purposes of protection of the water environment. To comply with the above regulations requires the provision of a new storage and dispensing facility. Proposals will need to be subject to agreement with Scottish Environment Protection Agency (SEPA). The works will include provision of a new integrally bunded tank, card operated dispensing system and decommissioning of the existing tank area. Whether the tank requires to be partitioned to provide "red" and "white" diesel, if an interceptor is required, how the card operated dispensing system would work and the extent of the works required to the existing storage area have been investigated. The relocation of the oil tanks would release an area of hard standing adjacent to the position of the temporary floating pontoon for passenger craft. If the existing unused nissan hut is also demolished then a large area could be released for other uses which have been raised by harbour users for example secure storage areas, or a permanent compound for use by various contractors employed by the council on building/engineering works in the harbour. The council has been approached about the locating of a Ship Chandler's outlet within this part of the harbour. Officers have prepared outline proposals together with indicative costs for consideration of this committee, which will be used in initial discussion with SEPA and other regulatory bodies.

4.4 Crew Room

4.4.1 There have been a number of complaints made to harbour staff in recent years regarding the adequacy and cleanliness of the toilet and shower facilities available at the harbour. Because the facilities are shared with all harbour users and are not cleaned on a daily basis, situations have occurred where leisure craft owners have gone to use the showers and found them below expected standards. Provision of a separate 'crew room' facility for leisure craft users has been suggested as a means
of overcoming this difficulty. During the trip to Peterhead officers visited looked at facilities in other marinas and harbours. These vary markedly from basic provision through to well-appointed kitchens, toilets and laundry facilities. It is recommended officers examine ways of installing a crew room perhaps in the fish market and report on details and costs to a future committee. In the meantime consideration will be given to the preparation of a set of management rules for the better control of the usage of the existing facilities.

4.5 Slipway for trailer mounted craft

4.5.1 With reference to item 5(c) of the Minute of the Meeting of this Committee on 23 November 2007, the potential of providing a slipping facility for trailer mounted craft was subject to debate at the Infrastructure Services Committee on 22 April 2008. An initial feasibility study indicated that construction of a slipway adjacent to the lifeboat slipway is technically feasible with a total outturn cost estimated to be in the region of £180,000. Before any final decision is made regarding the provision of a new public slipway, further work will be required to assess the location, the optimum period for access to be available, the potential number of users, what charges might be required to finance the facility and management and security arrangements.

4.5.2 This committee also agreed before embarking on this development of fuller proposals that the demand for a slipway be investigated in a market research exercise. The Head of Roads initiated this research with a view to reporting to this meeting of this committee. However the Infrastructure Services Committee directed that the consultation period be extended until 30 May 2008 and that any further proposal be reported to that committee. In the mean time an interim report based on the responses received by the original deadline for the consultation has been prepared for information and is attached in Appendix 4.

4.6 Potential Programme

The estimated current cost of the future works under consideration are set out in Table 1 below:-

Table 1 – Cost Estimates of Possible Future Works

<table>
<thead>
<tr>
<th>Arbroath Harbour Possible Future Works</th>
<th>Cost* Estimate £000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation of cathodic protection to steel sheet piles – to address ALWC</td>
<td>150</td>
</tr>
<tr>
<td>Contribution to installation of new oil dispensing facility (in conjunction with the AFA) compounds etc.</td>
<td>140</td>
</tr>
<tr>
<td>Repairs to west breakwater and harbour walls</td>
<td>500</td>
</tr>
<tr>
<td>Crew room, including toilet, shower and laundry facility</td>
<td>60</td>
</tr>
<tr>
<td>New slipway for leisure craft</td>
<td>180</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,030</strong></td>
</tr>
</tbody>
</table>

*April 2008 prices
4.6.1 These future works are currently the subject of ongoing consideration/investigation and further reports, including full details of the financial implications and funding mechanism, will be brought forward to future meetings of this Committee for information and to the Infrastructure Services Committee for determination.

4.6.2 Members should note however that there is currently no provision for the cost of any of these works at Arbroath Harbour within the 2007/2011 draft Financial Plan and hence these anticipated future costs will likely require to be phased over a period of years and/or through the re-phasing of other priority projects.

5 OTHER ISSUES

5.1 Arbroath Fishermen's Association (AFA) Operations

5.1.1 No report

5.2 Provision of Hard standing area (Small Boat Repair Area)

5.2.1 With reference to item 6(a) of the Minute of the Meeting of this Committee on 23 November 2007, the committee agreed that this provision would not be cost effective at this time

5.3 Keeps

5.3.1 With reference to item 6(g) of the Minute of the Meeting of this Committee on 23 November 2007, the harbour master has noted a number of instances where the ropes tying keeps have been placed inappropriately causing tripping hazards using handrail instead of tie rails. It is suggested that a short note is distributed to vessel owners regarding how and where keeps can be located safely.

5.4 Fire Hazards

5.4.1 With reference to item 6(h) of the Minute of the Meeting of this Committee on 23 November 2007, a plan detailing the location of the fire hydrants in the harbour has been put on display in the harbour office and notice boards.

5.5 Dropped Kerbs at Danger point

5.5.1 With reference to item 7(a) of the Minute of the Meeting of this Committee on 23 November 2007, these kerbs have been installed.

5.6 Redundant Lamp-Post in Boat Yard

5.6.1 With reference to item 7(b) of the Minute of the Meeting of this Committee on 23 November 2007, the electricity supply has not yet been cut and the main contractor is pursuing the matter.

5.7 2nd Hand Slipway Cradles From Macduff Harbour

5.7.1 In 2007 officers became aware that the fairly modern slipway cradles with hydraulic rams were available to buy after the slipway at Macduff harbour had been refurbished. During the trip to Peterhead the cradles were inspected. Unfortunately
the overall costs of purchasing transporting, modifying and fitting the cradles is uneconomic.

6 FINANCIAL IMPLICATIONS

6.1 Any financial implications arising indirectly from this report will be subject to approvals at the relevant Council committees in due course.

7 HUMAN RIGHTS

7.1 There are no human rights implications arising from the proposals in this report.

8 CONSULTATION

8.1 The Chief Executive, Director of Corporate Services, Head of Finance and Head of Law and Administration were consulted in the preparation of this report.

ERIC S LOWSON
DIRECTOR OF INFRASTRUCTURE SERVICES

NOTE:

No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (other than any containing confidential or exempt information) were relied on to any material extent in preparing the above Report.
## APPENDIX 1

### Angus Council: Roads Division, Infrastructure Services
#### Department

**Revenue monitoring to end of March 2008**

<table>
<thead>
<tr>
<th></th>
<th>Budget 2007/08</th>
<th>Unaudited Actual 2007/08</th>
<th>Variance £</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
<td>%</td>
</tr>
<tr>
<td><strong>ARBROATH HARBOUR</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditure:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff Costs</td>
<td>82,569</td>
<td>89,417</td>
<td>108.29%</td>
</tr>
<tr>
<td>Property Costs</td>
<td>19,500</td>
<td>16,510</td>
<td>84.67%</td>
</tr>
<tr>
<td>Supplies &amp; Services</td>
<td>64,300</td>
<td>66,937</td>
<td>104.10%</td>
</tr>
<tr>
<td>Transport Costs</td>
<td>200</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Third Party Payments</td>
<td>18,431</td>
<td>24,189</td>
<td>131.24%</td>
</tr>
<tr>
<td>CFCR</td>
<td>40,000</td>
<td>50,644</td>
<td>126.61%</td>
</tr>
<tr>
<td><strong>GROSS EXPENDITURE</strong></td>
<td>225,000</td>
<td>247,697</td>
<td>110.09%</td>
</tr>
<tr>
<td><strong>GROSS INCOME</strong></td>
<td>98,050</td>
<td>110,621</td>
<td>112.82%</td>
</tr>
<tr>
<td><strong>NET EXPENDITURE 07/08</strong></td>
<td>126,950</td>
<td>137,076</td>
<td>107.98%</td>
</tr>
</tbody>
</table>
APPENDIX 2

PORT MARINE SAFETY CODE
HARBOUR SAFETY AUDIT
13 DECEMBER 2007

Inspected by: G.Gray, Design Manager
B.Fleming, Design Engineer
G. Mair, Harbourmaster

<table>
<thead>
<tr>
<th>Activities</th>
<th>Action</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Main Harbour access adjacent to East Breakwater</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hazards</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Redundant lighting column in Mackay Boatyard.</td>
<td>To be removed by Contractor. SSE to disconnect.</td>
<td>High</td>
</tr>
<tr>
<td>ii) Mono blocks missing from area at Scottish Water Tanks</td>
<td>Roads Division to have area re mono blocked.</td>
<td>High</td>
</tr>
<tr>
<td>iii) Sea water unable to escape fully when coming over breakwater at Danger Point.</td>
<td>Scuppers to be investigated &amp; installed at end of Danger Point bridge.</td>
<td>Medium</td>
</tr>
<tr>
<td>iv) Anglers still insisting on casting lines over harbour entrance.</td>
<td>No fishing across harbour entrance' sign to be erected.</td>
<td>High</td>
</tr>
<tr>
<td>v) Recess in pier required to be cut out at ladders 44, 46, 48 &amp; 50 &amp; additional rung added.</td>
<td>Works to fix ladders to carried out in Spring 08</td>
<td>High</td>
</tr>
<tr>
<td>vi) Area of setts uneven signal tower.</td>
<td>Area of setts to be re levelled if money available in 08/09</td>
<td>Low</td>
</tr>
<tr>
<td>2. Signal Tower to Ballast Pier</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hazards</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Stone steps leading into water from pier deteriorating</td>
<td>New GRP treads to be installed on steps, Spring 08</td>
<td>High</td>
</tr>
<tr>
<td>3. Lifting Bridge to Black Shed</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hazards</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) No speed limit signs into harbour from Old Shorehead.</td>
<td>10 mph speed limit signs to be erected in 08/09</td>
<td>Medium</td>
</tr>
<tr>
<td>4. Black Shed Pier</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hazards</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Sections of stainless steel tie rails twisted &amp; coming apart.</td>
<td>Blacksmith to assess condition of tie rails. Install additional galvanized rings to tie up to in 08/09.</td>
<td>High</td>
</tr>
</tbody>
</table>
5. **Fish Market**  
   *Hazards*  
   None

6. **Oil Pier**  
   *Hazards*  
   i) Some wooden batons starting to become loose.  
   ii) White lining required at Oil Pier to prevent public access.

Rotten batons to be replaced & bolted down with new bolts. Corroded bolts to be replaced.  
Medium

7. **Road adjacent to Lifeboat Shed**  
   *Hazards*  
   i) No speed limit signs into harbour at Lifeboat Shed

To be addressed as final part of Environmental Enhancements  
Medium

8. **Car Parking adjacent to Shore**  
   *Hazards*  
   None  

10 mph speed limit signs to be erected in 80/09  
Medium
## SAMPLES TESTED FOR TRI ORGANO TINS (TOTS)

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Inner Basin (ug/L)</th>
<th>Inner Basin Silt (mg/kg)</th>
<th>Outer Basin (ug/L)</th>
<th>Outer Basin Silt (mg/kg)</th>
<th>Slip Way Silt (mg/kg)</th>
<th>Slip Way (ug/L)</th>
<th>Entrance Channel (ug/L)</th>
<th>Slipway Recycled Water (ug/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/04/08</td>
<td></td>
<td>0.11</td>
<td>0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.07</td>
</tr>
<tr>
<td>01/10/07</td>
<td>Organo Tin</td>
<td>&lt;0.003</td>
<td>&lt;0.003</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&lt;0.003</td>
</tr>
<tr>
<td>18/09/06</td>
<td>Organo Tin</td>
<td>0.055</td>
<td>0.029</td>
<td>-</td>
<td>-</td>
<td>0.021</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>22/05/06</td>
<td>Organo Tin</td>
<td>0.01</td>
<td>0.0007</td>
<td>0.01</td>
<td>0.0007</td>
<td>-</td>
<td>-</td>
<td>0.01</td>
<td>0.2</td>
</tr>
<tr>
<td>11/01/06</td>
<td>Organo Tin</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>28/02/05</td>
<td>Organo Tin</td>
<td>0.228</td>
<td>-</td>
<td>0.02</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>30/07/04</td>
<td>Organo Tin</td>
<td>0.0119</td>
<td>-</td>
<td>0.0121</td>
<td>-</td>
<td>0.02</td>
<td>0.0113</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>27/09/04</td>
<td>Organo Tin</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.038</td>
</tr>
<tr>
<td>21/10/03</td>
<td>Organo Tin</td>
<td>&lt;0.02</td>
<td>&lt;0.02</td>
<td>&lt;0.02</td>
<td>&lt;0.02</td>
<td>-</td>
<td>-</td>
<td>&lt;0.02</td>
<td>-</td>
</tr>
</tbody>
</table>

1 mg/l (milligram/litre) is 1 part in 1,000,000
1 ug/l (microgram/litre) is 1 part in 1,000,000,000
1 ng/l (nanogram/litre) is 1 part in 1,000,000,000,000
1 litre of water is equal in weight to one billion micrograms
1 ug/l equals 1 part per billion (ppb)
1  SAMPLES TESTED FOR E COLI

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Slip Way Wastewater</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/04/08</td>
<td>E. Coli.</td>
<td>ND*/100ml</td>
</tr>
<tr>
<td>1/10/07</td>
<td>E. Coli.</td>
<td>13cfu/100ml</td>
</tr>
<tr>
<td>18/09/06</td>
<td>E. Coli.</td>
<td>1/100ml</td>
</tr>
<tr>
<td>22/05/06</td>
<td>E. Coli.</td>
<td>ND*/100ml</td>
</tr>
<tr>
<td>11/01/06</td>
<td>E. Coli.</td>
<td>ND*/100ml</td>
</tr>
<tr>
<td>28/02/05</td>
<td>E. Coli.</td>
<td>ND*/100ml</td>
</tr>
<tr>
<td>27/09/04</td>
<td>E. Coli.</td>
<td>ND*/100ml</td>
</tr>
</tbody>
</table>

*Not Detectable.

Cfu = Colony Forming Unit
2  DREDGED SAMPLES TESTED

Samples taken July 06
(No testing of arising from dredging required in 2007)

<table>
<thead>
<tr>
<th>Location</th>
<th>As</th>
<th>Cd</th>
<th>Cr</th>
<th>Cu</th>
<th>Hg</th>
<th>Ni</th>
<th>Pb</th>
<th>Zn</th>
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<tr>
<td>Inner Basin</td>
<td>16.8</td>
<td>0.197</td>
<td>57.6</td>
<td>57.6</td>
<td>0.161</td>
<td>33.2</td>
<td>43.6</td>
<td>140.0</td>
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<td>Outer Basin</td>
<td>6.10</td>
<td>ND</td>
<td>26.0</td>
<td>26.0</td>
<td>0.074</td>
<td>17.2</td>
<td>12.2</td>
<td>43.5</td>
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<tr>
<td>Main Channel</td>
<td>14.0</td>
<td>ND</td>
<td>52.8</td>
<td>52.8</td>
<td>0.144</td>
<td>30.7</td>
<td>36</td>
<td>84.8</td>
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</tbody>
</table>

All concentrations reported on a dry weight basis.

Trace metals reported in mg/kg
Tributyl tin reported in ug/kg
ND – not detectable.
RESPONSES TO QUESTIONNAIRE ON PROPOSED NEW SLIPWAY AT ARBROATH HARBOUR

INTERIM REPORT
April 2008

Over 200 copies of the questionnaire entitled ‘Proposed New Slipway at Arbroath Harbour’ (app. 1) were sent to users and potential users of Arbroath Harbour on Wednesday, April 8, covering an area of approximately 50 miles radius of Arbroath. From April 8 onwards, the questionnaire was also available at the Arbroath Harbour Office, the local Tourist Information Centre and shops within the vicinity of the harbour, as well as on the Angus Ahead website.

To publicise the questionnaire and encourage interested parties to respond, a poster (app. 2) was displayed in and around the vicinity of the harbour.

As well as the questionnaires which were sent directly to users and potential users of Arbroath Harbour and the questionnaires which were available at the Harbour Office, Tourist Information Office and local shops, further questionnaires were sent directly to members of the public who had either read the reports about the proposals in the press, seen the posters or heard about it via word-of-mouth.

The original closing date for the questionnaire was Friday, April 18. By Monday, April 21, 115 questionnaires had been returned by post and email and a varied selection of comments had been received via email.

This interim report provides information based on the responses received by Angus Council Roads Division by Monday, April 21. It is worth noting that not all respondents answered all the questions – and some gave more than one answer per question.

Although there was no obligation to provide details of who had answered each questionnaire, many respondents included their name and address, as well as information about their connection with Arbroath, with replies coming from representatives of sailing clubs, diving clubs and angling clubs, commercial fisherman, divers, lifeboat men, local councillors and people who are directly involved with harbour operations, including harbour masters and dredging engineers. The bulk of the replies came from the Angus area but there were replies from Aberdeenshire, Ayrshire, Fife and East Lothian.
RESULTS

1. At present, how often do you use the harbour facilities at Arbroath Harbour?

![Pie chart showing frequency of use]

There were 109 responses to this question. Additional responses included ‘present berth holder’ (3), and ‘every day’ (6).

2. When you use the harbour facilities at Arbroath, what is the main purpose of your visit?

![Pie chart showing purposes of visit]

There were 148 responses to this question, which indicates that many of the respondents use the harbour for more than one purpose. Eight of the responses indicated that their ‘other’ activity was diving.
3. Do you think a public slipway in Arbroath Harbour for small, trailer-mounted vehicles would be of benefit to people living within a 50-mile radius of Arbroath Harbour?

4. Would you use the harbour more if there was a public slipway in Arbroath Harbour for small, trailer-mounted vessels?

There were 103 responses to this question, with 75% (3/4) of responses indicating an increase in use of the harbour.

5. Do you think a new slipway would be a worthwhile addition to the facilities already available at Arbroath Harbour?
6. As Arbroath Harbour is tidal and not generally accessible when the tide is low, ideally, would the slipway give access to the sea:

- At all times, regardless of the tide: 71
- Four hours either side of high tide: 25
- Two hours either side of high tide: 6
- Other: 4

There were 106 responses to this question, with nearly 67% (2/3) in favour of the slipway providing access at all states of the tide.

7. Ideally, when should the slipway be available to the public, given that the tide cycle does not coincide with a 24-hour day but is approximately a 13-hour cycle, with high tide moving by 40 minutes a day?

- Same opening hours as the harbour: 52
- During daylight hours: 31
- During daylight hours but in line with suitable tides: 14
- 24 hours a day, 7 days a week: 14

There were 91 responses, with just over 50% in favour of 24-hour opening.

8. Should access to the slipway be controlled?

- Yes - access provided by harbour staff: 48
- Yes - access provided by swipe card: 28
- Yes - key from Harbour Office or Tourist Information Office: 14
- No: 23
There were 93 responses, split equally between some form of control and none.

9. If a charge were to be levied ‘per launch’, what should this be?

![Pie chart]

There were 107 responses to this question, with the majority favouring a charge of £5 per launch. Of the 21 who responded “other”, 13 favoured no charge.

Comments (email and questionnaire)
So far, the comments received, both in the questionnaires and by email, have been largely in favour of the provision of a new slipway, with this being widely perceived as a long-awaited, much needed facility. Comments include:

- “We have no objection to the possible slipway for trailer-mounted day-boats at Arbroath Harbour.” RYA Scotland
- “I believe a new slipway would attract more people to use the facility.” J., Arbroath by email
- “Great idea – there is a serious lack of this type of facility in Scotland.” W.K., Ayr
- “A slip at Arbroath would be of great use to divers.” G.G., Edinburgh, by email
- “Jet skis kept at low-speed until clear of the harbour area.” C.W., Arbroath
- “A slipway at Arbroath with as much tidal range as possible would be excellent.” I.S., Carnoustie, by email
- “If this is to be paid from by our council tax, do locals get to use the facility at a cheaper rate?” R.M., Arbroath, by email
- “I would definitely bring my boat and trailer across to fish in the immediate area.” S.C., Prestwick, by email
- “Installing a slipway for small boats would be waiting for an accident to happen.” V.B., Cupar
- “Will secure parking be provided?” M.H., Kirkcaldy
- “A slipway would be an added attraction to visitors.” C.R., Arbroath
- “A slipway for small boat owners is long overdue.” R.McL, Monifieth
- “I sold my boat because launching was too much of a problem. This is an absolute necessity if the harbour is to advance as a recreational port.”
- “This should be a priority, considering the total lack of slipways in the north east.”
• “My main concerns are that this slipway will attract a lot of fast speed boats and jet skis... making it very dangerous for other users.” D.Y., Arbroath
• “I hope this is the first of many suggestions that should be addressed in Arbroath to bring more valuable much needed business locally.” J.O., Arbroath
• “A slipway would only benefit the privileged few and would have no benefit to most people in the Arbroath area.” M.S.
• “I have many friends who have/would get small boats if a slipway was available at Arbroath.” J.W., Brechin
• “Give Montrose/Ferryden a slip as well.” By email
• “Provide the launch facility and the users will come.” A.K., Arbroath
• “A slipway would enhance the reputation of Arbroath.”
• “Until I have a berth or a proper slip is installed, I will not use Arbroath.” N.C., Arbroath
• “Are these vehicles insured? If not and they hit a boat in the harbour, will the council be good for any claim?”
• “I occasionally visit the harbour to watch the boats while eating fish and chips... I would happily tow my vessel to launch at Arbroath if a suitable facility was available.” IL, by email

CONCLUSION
According to the results collated to date, there appears to be a majority in favour of a new slipway being provided for small, trailer-mounted vessels at Arbroath Harbour. Most of the people who returned questionnaires by the original closing date of April 18 were of the opinion that not only would they use the harbour more if such a facility existed but that it could be of considerable benefit to others, to the harbour and to surrounding businesses.

The responses revealed that most people would like the proposed new slipway providing access to the sea at all times, and a similar response was received to the question about the opening hours of the proposed new slipway, with the majority of responses favouring the slipway being open 24-hours-a-day, seven days-a-week. Responses to the question on controlled access were split equally between uncontrolled and controlled access being provided by the harbour staff, a swipe card or by collecting a key from the harbour office or tourist information office.

The question about the possible charge for the slipway produced a wide range of answers other than the suggested options. Several questionnaires including both a tick or a cross against an amount, as well as a further suggestion next to ‘other’, including:

- an annual fee of £100
- a meter
- a £12 charge
- a £30 charge
- a charge of £5 per person
- charges dependent on engine size
Several questionnaires recommended there should be no charge for those already paying harbour dues or with a berth in the harbour – and there were 13 comments that the use of the slipway should be free of charge.

A selection of issues were raised by the comments section at the end of the questionnaire and by email, including parking, safety, noise, insurance and speed, especially of jet skis.

In light of the considerable interest shown in this proposal, Angus Council has extended the consultation period until May 30, 2008, which will enable the views of as many people as possible regarding the possible provision of a new slipway at Arbroath to be obtained.

It has been decided that completed questionnaires and/or comments must be with Angus Council by Friday, May 30, 2008. Returns will then be compiled in a final report, which will be considered by the council's Infrastructure Services Committee and the Arbroath Harbour Joint Consultative Committee.

Wendy Glass
Consultant Market Researcher
24 April, 2008
Appendix 1

PROPOSED NEW SLIPWAY AT ARBROATH HARBOUR

Please indicate your answer to each question with a tick or cross in the relevant box. If you would like to pass further comment on the proposed new slipway at Arbroath harbour, you can do this at the end of the questionnaire.

1. At present, how often do you use the harbour facilities at Arbroath?
   - □ Once a week
   - □ Once a month
   - □ Once a year

2. When you use the harbour facilities at Arbroath, what is the main purpose of your visit?
   - □ Business
   - □ Jet skiing
   - □ Powerboating
   - □ Sailing
   - □ Sea Angling
   - □ Sporting purposes
   - □ Yachting
   - □ Other

3. Do you think a public slipway in Arbroath Harbour for small, trailer-mounted vessels would be of benefit to people living within a 50-mile radius of Arbroath?
   - □ Yes
   - □ No

4. Would you use the harbour more if there was a public slipway in Arbroath Harbour for small, trailer-mounted vessels?
   - □ Yes - slightly more than at present
   - □ Yes – about double present usage
   - □ Yes - considerably more than at present
   - □ No

5. Do you think a new slipway would be a worthwhile addition to the facilities already available at Arbroath Harbour?
   - □ Yes
   - □ No

6. As Arbroath Harbour is tidal and not generally accessible when the tide is low, ideally, would the slipway give access to the sea:
   - □ At all times, regardless of the state of the tides?
   - □ Four hours either side of high tide (a total of eight hours a day)?
   - □ Two hours either side of high tide (a total of four hours a day)?
   - □ Other – please specify
7. Ideally, when should the slipway be available to the public, given that that tide cycle does not coincide with a 24-hour day but is approximately a 13-hour cycle, with high tide moving by 40 minutes a day?

☐ Same opening hours as the harbour (7am-8pm summer, 7.30am-5.30pm winter)
☐ During daylight hours
☐ During daylight hours but in line with suitable tides
☐ 24 hours a day, seven days a week

8. Should access to the slipway be controlled?

☐ Yes - with access provided by harbour staff
☐ Yes - with access provided by swipe card
☐ Yes – with a key available from Harbour Office and/or Tourist Information Office
☐ No

9. If a charge were to be levied ‘per launch’, what should this be?

☐ £5
☐ £10
☐ £20
☐ Other - please specify

Do you have any other comments or suggestions about the proposed new slipway at Arbroath Harbour?

If this is not enough space, please attach a separate sheet of paper to your completed questionnaire.

You may return this form to
The Harbourmaster,
Harbour Office, The Shore, Arbroath, DD11 1PD
Or to
The Head of Roads, Angus Council,
County Buildings, Market Street, Forfar DD8 3WR
Do you think there should be a new slipway at Arbroath Harbour?

Angus Council has been asked to consider building a new slipway at Arbroath Harbour for sailing boats, small yachts, power boats, dinghies and jet-skis.

The proposed slipway would enable small, trailer-mounted vessels to be landed and recovered. However, before proceeding any further, we’d like to find out if there’s a demand for such a facility at Arbroath Harbour.

- Would you use the harbour more if there was a slipway specifically for small vessels?
- If there was such a slipway, how many hours a day would you like to be able to use it?
- Would you like the slipway to provide access to the sea at all times or would two hours either side of high tide be enough?

To share your views about the proposed new slipway with Angus Council, a questionnaire is available at the Harbour Office in Arbroath, the Tourist Information Office in Arbroath and at www.angus.gov.uk.

Completed questionnaires must be returned by April 18, 2008.