



---

**REPORT TO: ECONOMIC GROWTH, HOUSING AND ENVIRONMENTAL  
SUSTAINABILITY COMMITTEE ON 24 AUGUST 2021**

**SUBJECT: MARINE SAFETY Q1 2021-2022**

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND  
FINANCE)**

**1. REASON FOR REPORT**

- 1.1 To inform the Committee with regard to matters of Marine Safety and compliance with the Port Marine Safety Code (PMSC) for the first quarter of 2021/22.
- 1.2 This report is submitted to the Economic Growth, Housing and Environmental Sustainability Committee following a decision of Moray Council on 17 June 2020 to agree a simplified committee structure as a result of the COVID-19 pandemic. In the case of this committee the combining of the delegated responsibilities of Economic Development and Infrastructure, Community Services (Housing and Property) and Finance (budget, capital and revenue monitoring) (para 9 of the minute refers).

**2. RECOMMENDATION**

- 2.1 **Committee is asked to consider and note the safety performance, fulfilling their function as Duty Holder under the Port Marine Safety Code.**

**3. BACKGROUND**

- 3.1 A report was submitted to the meeting of the Economic Development and Infrastructure Services Committee on the 20 March 2018, with the subject Port Marine Safety Code (PMSC).
- 3.2 Paragraph 6 of the minute of that meeting instructs officers to report quarterly to this Committee, as the Duty Holder, on matters of marine safety.

**4. COMMITMENT TO THE PMSC**

- 4.1 Moray Council, in its capacity as a Statutory Harbour Authority, is committed to undertaking and regulating marine operations to safeguard all its harbour areas, the users, the public and the environment.

- 4.2 The aim of the harbour team is to manage operations safely, efficiently, sustainably and as a benefit to all of the users and wider communities.
- 4.3 The team are committed to:
- a) full compliance with all legal requirements in harbour operations while seeking to meet the changing needs of all harbour users.
  - b) ensuring that all personnel are well trained, engaged and committed to improving safety in all processes. Competent skilled personnel backed by an active safety culture are key to a positive safety record.
  - c) undertaking hazard identification and risk assessments when required and implementing improvement measures where necessary.
- 4.4 The team expect that all harbour users recognise the effect that they can have on the harbours operation and reputation and must work to our standards as a minimum. A Permit to Work system is in place to maintain control over hazardous work. The team will ensure that any contractors or others management systems fully support the same commitment to health, safety and environmental performance.

## **5. VESSEL MOVEMENTS**

- 5.1 In the first quarter of 2021/22 there were 23 cargo movements (arrival and departure) at Buckie. This included 14 acts of pilotage, 9 in and 5 out, with 1 of the operations being during the hours of darkness.
- 5.2 There were 6 imports of Malt and 1 of soya. There was also 1 vessel which discharged several large heavy components for the Blackhillock power station which were transported from Buckie. There were 2 ships in to collect fabricated items from Forsyth's yard including distillation and offshore oil items.
- 5.3 There was an inconsistent level of fish landings during Q1 with a moderate density of traffic using Burghead and Buckie as some vessel owners remain on Furlough and lower prices for prawns decreased the economic viability of smaller trawlers working at this time. This level of inconsistency had improved toward the end of the quarter with numbers increasing and some larger trawlers visiting for short landings. Within the smaller harbours and the creel boat market sparse numbers of crabs and lobsters during the last quarter have resulted in lower landing numbers.
- 5.4 Vessels continued to arrive consistently at Buckie for maintenance work at Macduff Shipyards including fish farm vessels, small ferries and various fishing boats. The shipyard have kept a steady amount of work coming through the harbour and during the quarter they launched their latest new fishing boat which is now being fitted out on pier 4.

## **6. CONSERVANCY**

- 6.1 Dredging started at the beginning of May with the focus being the channel at Buckie and the entrance of Burghead. The channel at Buckie was cleared to

2.1m and a relevant notice to mariners was shared with harbour users. The next stage is to continue dredging the south west area of the channel to achieve a navigable channel with water depth of 2.5 m below chart datum by September. In Burghead the plan involves tackling the sand bank situated to the west of the harbour entrance producing a good navigation corridor into the harbour entrance.

- 6.2 Several digs were carried out in Findochty but due to the levels and the lack of under keel clearance Selkie was not able to work in the area of the new pontoons until more digging had been carried out. Due to dredging licence limits the amount of spoil that could be moved was limited therefore it was decided that land dredging was a viable option to maximise the benefits of the dredging.
- 6.3 The dredging was carried out with land based equipment to remove spoil from the inner basin to the outer basin. This allowed Selkie to access it and remove to spoil grounds offshore. Strath Civil completed the job to a high standard as can be seen by the additional water in the harbour at low tide. There remains some spoil still, which, was put to the outer basin to be moved. This will be removed in due course by Selkie as part of the overall dredging plans.
- 6.4 Due to the positioning of Selkie while removing the spoil the west and east piers had to be closed to the general public. This was due to members of the public jumping into the prop wash from the quayside and was a matter of health and safety to avoid potential injuries.
- 6.5 The priority areas for dredging remain Burghead (sand bank approaching harbour entrance) and Buckie (entrance channel). Other dredging requirements include:
  - Findochty: when tides allow go in and remove the rest of the spoil and maximise the dredging allowance.
  - Hopeman: When dredging in Burghead over the spring tides if the weather is suitable Selkie will go to Hopeman.
  - Cullen: removal of sand from the beach side of the basin.
  - Portknockie: no major issues at this time.

## **7. GENERAL SAFETY MATTERS**

### **Buckie**

- 7.1 Multiple areas including pontoon walkways and quayside cleaned and treated with algae cleaner. This maintains the materials ensuring more stable structures and reduces trip and slip hazards.
- 7.2 Several electrical issues identified and rectified with some additional repairs to the protection cupboards.
- 7.3 North pier gate had to be closed due to damage to the pier surface making it unsafe to walk or drive on. Access for work purposes is still allowed with

harbour staff briefing those requiring access of the hazards. Repair works are being commissioned and are anticipated to be completed by the end of October.

- 7.4 Rope ladder building continued as and when time allowed providing better and safer access.
- 7.5 Coxswain and pilot training continues increasing resilience which will improve safety and efficiency of the harbour allowing increased pilot knowledge and skills as well as less workload for individuals.
- 7.6 Exercises were carried out with the RNLI including a deadship towing exercise with the pilot vessel. This exercise helped to improve response to breakdowns in the coastal waters and around the harbour as well as improving communication and collaboration between the Harbour and the RNLI station.

#### Burghead

- 7.7 Pressure washing and algae treatment carried out throughout the quarter. This was focussed on the quayside and around chill and ice machine areas reducing slip hazards for users.
- 7.8 Control of weeds was also managed by staff by mechanical and chemical means fully controlled by COSHH and risk assessment. This provided clearer access both at the quayside for boat owners reducing trip risks as well as in general for public use on footways again reducing trip hazards. The control of weeds also ensures management of the quay and pier structure ensuring that root encroachment does not progress potentially leading to stresses and cracks in walkways piers and quays.
- 7.9 Several issues with general public jumping in the harbour for recreation activities. Discussions held with individuals on how unsafe this can be. This is difficult to manage as the general public attitude is that harbours are free to use for leisure regardless of the potential consequences. This links to the new work on water safety being done collaboratively with coastal partners (see Para 10 below).

#### Hopeman

- 7.10 The rope ladder project of replacement continued and is nearing completion with only a few left to change over. This provides safer access to the basin from the quays for harbour users.
- 7.11 Rescue ladders were fitted to the pontoons providing extra means of access and or escape from the pontoons and water.

#### Findochty

- 7.12 Life ring holder was moved from a standalone position at the road side where it was in a position of remote access to a safer location away from road traffic where it is better protected and next to existing harbour amenities making it easier to locate.

- 7.13 Ladder handrails fitted provide additional support and safety points of contact for users.
- 7.14 Old pontoon anchor chains and moorings which could provide a navigational hazard were removed from the harbour basin.

#### Portknockie

- 7.15 Planned Capital works were near completion which included the reinforcement of the North Pier ensuring increased protection from wind/wave erosion thus improving safety for users of the pier. Handrails will be reinstated in the coming few weeks to complete this project.
- 7.16 Work carried out on the pontoons securing fingers in place.
- 7.17 Cleaned and treated the slip with algicide ensuring slip hazard removed and the structure of the slipway is protected from erosion as algae encroaches.
- 7.18 Replaced life ring holder at paddling pool which had been removed ensuring the paddling pool area was safe to use given its popularity and time of year this was critical. The circumstances regarding the removal of the life ring are unknown and this appears to have been an act of vandalism.

#### Cullen

- 7.19 No major safety issues or updates to be reported.

### **8. INCIDENT STATISTICS**

#### Injuries:

- 8.1 There were no injuries to harbour staff during the quarter.
- 8.2 There was 1 reported injury to a crew member of a fishing vessel which occurred during an incident outlined below.

#### Incidents:

- 8.3 There were 2 groundings in the channel of Buckie harbour, 1 in May and 1 in June.
- 8.4 The first incident occurred when a tug taking out a barge had not factored in the pressure variation on the tide. Unfortunately even with a passage plan taking into account tide and weather and a reporting of draft and under-keel clearance considerations due to unusually high pressure this had the effect of pressing down on the tide lowering the available water. The master waited a short time and once floating again continued to make his way out with no other issues.
- 8.5 The second grounding occurred during extremely low visibility below 100m with a relatively unfamiliar watchman on duty. The vessel made the approach without confirmation of the depth in the channel either confirmed or agreed.

This lack of formal communication contributed to the grounding as the vessel chose to enter the harbour without confirmation of available water depth.

- 8.6 While waiting to float again an incident occurred in which a crew member of the vessel was injured by a grapple hook being used as an attempt to aid the grounded vessel.
- 8.7 Due to these groundings and the resulting injury as well as another groundings in December of last year it was felt prudent to ask the designated person (Marex Marine) to carry out an external investigation on our behalf.
- 8.8 This was carried out with several action items identified. The main one is a change in the ' communication with vessels when calling to enter or depart: it is now mandatory to confirm the vessels draft and inform them of the depth in the channel so they can make the decision on whether it is safe for them to continue. This protocol is logged and all harbour assistants and watchmen have signed a document agreeing with the new reporting procedure.
- 8.9 A new system of checklists to ensure documentation of communications between vessels and the harbour staff has been put in place for arrivals and departures.

Near Misses:

- 8.10 None.

**9. KEY PERFORMANCE INDICATORS**

Pilotage

- 9.1 Pilotage is not compulsory at Buckie harbour, and therefore not all cargo movements require the services of a pilot. The number of pilotage acts carried out in the first quarter of 2021/22 was 14, in relation to 11 vessel movements in and out of the harbour.

Aids to Navigation

- 9.2 As a Local Lighthouse Authority, Moray Council is required to report the availability of all its navigational lights to the Northern Lighthouse Board in March of each year. The following table gives the detail that is reported on an annual basis. This is the table submitted in March 2020.

Table 1: Availability of Navigation Lights

IALA Category	No Of Aids	Total Hours	No Of Failures	OOS Hours	MTTR	MTBF	Availability	Target Availability
<b>Moray Council</b>								
CAT 1	1	26,304	0	0:00	0:00	0:00	100.00 %	99.80 %
CAT 2	15	394,560	4	26403:25	6600:51	92039:09	93.31 %	99.00 %
CAT 3	4	105,216	1	18350:00	18350:00	86866:00	82.56 %	97.00 %
No Category	0	0	0	0:00	0:00	0:00	0.00 %	0.00 %
<b>Totals</b>	<b>20</b>							

Key to headings:

IALA International Association of Marine Aids to the Navigation and Lighthouse Authorities  
OOS hours Out of service  
MTTR Mean Time To Repair  
MTBF Mean Time Between Failures

9.3 The low Availability shown in Table 1 for the Cat 2 and 3 lights was principally due to the old and unreliable lights at Cullen and Portknockie. These have now been replaced with new solar units.

9.4 Table 2 lists all the navigation aids currently managed by the Council. There is only one Category 1 light, which is located on the West Mucks at Buckie harbour, principally to aid cargo vessel movements. There are eleven Category 2 lights and four Category 3 lights of which two are unlit beacons.

<b>Table 2: Moray Council - Aids to Navigation</b>						
<b>ALLFS No.</b>	<b>AtoN No.</b>	<b>Aton Name</b>	<b>Aton Type</b>	<b>Character</b>	<b>Range</b>	<b>IALA Cat</b>
A3396.1	3396.1	Buckie Harbour. Cliff Terrace.	Sector Light	Iso WG 2s	16	CAT 2
A3394	3394	Buckie Harbour. N Pier. Lts in line 096. Rear. 60m from front	Leading Light	Oc R 10s	15	CAT 2
A3392	3392	Buckie Harbour. North Pier Lts in Line 096. Front	Leading Light	2 F R(vert)	9	CAT 2
A3396	3396	Buckie Harbour. W Pier. Elbow	Light	2 F G(vert)	4	CAT 2
A3391	3391	Buckie Harbour. West Muck	Light	Q R	7	CAT 1
A3429.	3429.	Burghead Harbour. Entrance Groyne	Light	Fl G 5s	1	CAT 2
A3428.5		Burghead Harbour. Fishing Transit Light	Light	FG	1	CAT 3
A3424	3424	Burghead Harbour. N Pier. Head	Light	Oc W 8s	5	CAT 2
A3428	3428	Burghead Harbour. S Pier. Head	Light	Q G	5	CAT 2
A3426	3426	Burghead Harbour. Spur. Head	Light	Q R	5	CAT 2
	3383U	Cullen Harbour. North Pier.	Unlit Beacon			CAT 3
A3372	3372	Cullen Harbour. Outer Basin.	Light	Fl G	2	CAT 3

A3385	3385	Findochty. Ldg Lts 166deg. Front.	Leading Light	F R	3	CAT 2
A3385.1	3385.1	Findochty. Ldg Lts. Rear. Harbour Road. 30m from front	Leading Light	F R	3	CAT 2
	3386U	Findochty. West Pier	Unlit Beacon			CAT 3
A3418.1	3418.1	Hopeman Harbour. Ldg Lts 081deg. Rear. 10m from Front	Leading Light	F R	4	CAT 2
A3418	3418	Hopeman Harbour. N Quay. Elbow. Ldg Lts 081deg. Front	Leading Light	F R	4	CAT 2
A3416	3416	Hopeman Harbour. W Pier. Head	Light	Oc G 4s	4	CAT 2
A3382.1	3382.1	Portknockie Harbour. Ldg Lts 150 30' (Rear)	Leading Light	Fl G	2	CAT 2
A3382.	3382.	Portknockie Harbour. Ldg Lts. 150 30' (Front)	Leading Light	Fl G	2	CAT 2

- 9.5 Local Lighthouse Authorities are required to manage their Aids to Navigation within international guidelines as determined by the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA). Aids to Navigation (AtoN) are categorised according to their navigational importance with their 'availability' requirements reflecting this:

Availability	Objective	Definition
Category 1	99.8%	AtoN considered to be of primary navigational significance
Category 2	99.0%	AtoN considered to be of navigational significance
Category 3	97.0%	AtoN considered to be of less navigational significance

- 9.6 The 'Availability Objective' is calculated over a rolling 3-year period. This means that over this period a Cat 1 AtoN needs to be functional for 99.8% of the time.

## 10. **GENERAL COMMENTARY**

### Water safety

- 10.1 In May there began to be an increase in the numbers of people using the harbours for watersports activities including swimming, paddle boarding and kayaking.
- 10.2 The increased traffic in the harbours has caused a concern among regular harbour users as there are instances where vessels, particularly non-motorised vessels, do not comply with the conventions around navigation within harbours.
- 10.3 As we move into summer there are increasing number of leisure and non-motorised users in the harbour environment, increasing the levels of concern. Harbour staff have been educating people whenever possible in relation to the risks in and around the working harbours, however it is unfortunate that sometimes this information is ignored or worse staff are verbally abused.



- 10.4 The harbourmaster has made contact with the coastguard officer and lifeboat coxswain to consider a multi-agency approach to water safety. The discussion progressed to a liaison with RNLI Water Safety Lead for Scotland who in turn made contact with the harbourmaster with some suggestions.
- 10.5 With the Harbourmaster as lead there has since formed a water safety group comprising of the RNLI, MCA, Fire Brigade, water sports companies, fishermen, harbour staff and users and other council staff who work in or around water.
- 10.6 This initiative is not just coastal focussed, it also includes all inland water areas in Moray.
- 10.7 A Water Safety Group has been formed, with the first meeting programmed early in Q2 (July 2021). The remit for the group will be to discuss various safety issues and look to improve all aspects of water safety.
- 10.8 Education will be the key focus and both the RNLI and MCA will help to promote the initiative with plans for school visits and visits to other organisations and events.

#### Signage

- 10.9 There has been a full audit identifying new signs required around the harbours including, 4 signs to restrict general access to the pontoons as well as general harbour operations signs designating visitor berths, operational speed restrictions in the harbours warnings and keep slipway clear signs.

### **11. FUTURE OBJECTIVES AND PLANS**

#### **11.1 Objectives identified for 2021 and beyond include the following:**

- Review of the Safety Management System: the SMS is currently under routine review and a revised SMS will be presented to a future meeting of this committee this will include emergency response and preparedness review, full risk assessment and health and safety reviewing and updating.
- Monitor consistent incident reporting, including potential incidents.
- Implement new KPIs.
- Undertake further reviews of Marine Policy, SMS and training requirements.
- Maintain momentum of Pilot training and accreditation.

## **12. SUMMARY OF IMPLICATIONS**

**(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))**

Sustainable harbours maintained to operate safely and efficiently contribute to the economic development of Moray.

**(b) Policy and Legal**

Non-compliance with the Code will have legal implications.

**(c) Financial implications**

Non-compliance of the Code may have financial implications.

**(d) Risk Implications**

Prosecution of the authority may result from the failure to comply with the Port Marine Safety Code.

**(e) Staffing Implications**

No staffing implications arise from this report.

**(f) Property**

There are no property implications arising from this report.

**(g) Equalities/Socio Economic Impact**

There are no specific equalities matters, however, the Equalities Officer has been consulted and comments incorporated into this report.

**(h) Consultations**

The Depute Chief Executive (Economy, Environment and Finance), Legal Services Manager, Principal Accountant, Committee Services Officer (L Rowan), and Equalities Officer have all been consulted and their comments incorporated into this report.

## **13. CONCLUSION**

**13.1 The Council is currently deemed to be compliant with the PMSC, however, work to maintain a safe environment remains an ongoing matter in an operating environment.**

Author of Report: Stuart Akass, Harbours Development and Operations Manager

Background Papers:

Ref: SPMAN-524642768-481