

Navigation Committee

15 April 2021

Agenda item number 13

Annual Safety Audit 2020

Report by Head of Safety Management

Purpose

To present the annual review of marine incidents.

Broads Plan context

4.3: Implement, promote and monitor measures to maintain and improve safety and security for the navigation and boats.

1. Annual Marine incidents

- 1.1. Appendix 1 gives details of the main marine incidents reported during the period April 2020 to March 2021, including an analysis of deaths and personal injury since 1995. When considering the large number of visitors to the Broads, especially during the Coronavirus pandemic where we have seen many new visitors, the analysis demonstrates that the Broads continues to be a safe place for boating and boating-related activities.
- 1.2. The Authority has continued to highlight the message of personal responsibility for safety in its publications, and Rangers brief boat users on key safety messaging. However, during 2020/21 we have seen an increase in deaths on or from boats, and an increase of persons entering the water.
- 1.3. Notable points are:
 - 7 reported fatalities, 5 on or from boats, and 2 reported deaths not related to boating.
 - 27 reported incidents of persons inadvertently entering the water, a 59% increase from the previous safety report. Where gender had been reported, it was noted that there were more females entering the water than males.
 - Boat fires continue to remain at a low level, as in previous years.
- 1.4. Due to the increase of new visitors to the Broads in 2020, and the number of fatalities and incidents involving persons entering the water, the Authority has developed and implemented a safety package for the 2021/22 season. This involves investing in five additional Rangers to increase the level of patrolling of the busy waterways and a

package of animated safety videos targeted at visitors hiring boats, particularly to help those that are new to boating. The videos have been introduced with the support from the Broads Hire Boat Federation, British Marine, HM Coastguard, Broads Beat, RNLI, Royal Yachting Association and the Aweigh Application. The links to the videos will be sent by the Hire Boat Operators to their customers prior to their arrival and they will check that they have been viewed during the handover process. The online videos can be found in the following link: [Boating essentials \(broads-authority.gov.uk\)](https://www.broads-authority.gov.uk/boating-essentials).

- 1.5. A training event took place at Great Yarmouth Yacht Station on 17 March 2021 for handover hire boat staff, and 57 people attended from 5 boat yards. The training was led by the Ranger Team with input and assistance from the Maritime and Coastguard Agency (MCA), Royal National Lifeboat Institution (RNLI) and Broads Beat. The training covered the main hazards in the more tidal areas, focusing on the key knowledge boaters need to be aware of. It also highlighted the role of the Ranger team, MCA and RNLI on Breydon Water. The RNLI and MCA also covered the water side responder course, which included use of a throwline. The feedback the Authority received from the attendees was excellent. There are plans to hold another course in early April, with a date to be confirmed.
- 1.6. In summary the incident rate within the Broad's executive area has seen an upward trend, with the highest increases being observed as members of the public inadvertently entering the water. Factors for this are varied but a large contributor was following the capsizing of smaller vessels like kayaks and canoes. Again, the increase in entry level vessels, has been attributed to the Coronavirus pandemic and the Government restrictions. The Authority is currently looking at actions and measures which will address some of these issues, as well as reinforcing the message about wearing the correct safety equipment.

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Date of report: 24 March 2021

[Broads Plan](#) objectives 4.3

Appendix 1 – Annual Marine Incident Statistics

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The reporting periods are from the 1st April 2020 to March 2021. The report is limited to the Broads Authority’s executive area for marine responsibility. Notable incidents are listed below.

Table 1

Summary of incidents reported.

| 2020 | Incident details | Hazard log category |
|------|--|----------------------------|
| 5/4 | Elderly male fell from vessel at Potter Heigham | Embarkation/Disembarkation |
| 11/4 | Female jumped in at Wroxham. Mental health issues | Jumped in |
| 13/5 | Male rescued after capsizing sailing dinghy Oulton Broad | Fallen in |
| 16/5 | Male fell from boat at Loddon | Fallen in |
| 19/5 | Medical evacuation in Brundall. Hospitalised. | Medical |
| 20/5 | Female injured on sailing vessel on Hickling. | Injury |
| 30/5 | Rescued following capsized dinghy at Thurne | Fallen in |
| 19/6 | Male drowned in Wensum near Norwich Yacht Station | Fatality |
| 24/6 | Male injured following engine fire. Burns to legs | Fire/injury |
| 27/6 | Medical evacuation from vessel – cardiac. | Medical |
| 30/6 | Fire on vessel at Horning – minor burns | Fire/injury |
| 4/7 | Male rescued from water at Norwich Yacht Station | Fallen in |
| 7/7 | Male injured working on pontoon when hit by hire cruiser at Great Yarmouth | Injury |
| 8/7 | Male rescued from water at Great Yarmouth while mooring | Embarkation/Disembarkation |
| 12/7 | Medical evacuation from vessel at Malthouse Broad | Medical |
| 12/7 | Medical evacuation following fall on vessel at Thurne Dyke | Injury |
| 13/7 | Medical evacuation following fall from vessel at How Hill while mooring. | Embarkation/Disembarkation |

| 2020 | Incident details | Hazard log category |
|-------------|--|----------------------------|
| 26/7 | Female collapsed on vessel moored at Reedham Quay – medical evacuation | Medical |
| 28/7 | 2 males rescued from water at Malthouse Broad following dinghy capsize | Fallen in |
| 30/7 | 3 persons rescued from water at Norwich Yacht Station following canoe capsize | Fallen in |
| 4/8 | Medical evacuation following fall into water while mooring at St Benets | Embarkation/Disembarkation |
| 8/8 | Male rescued from water at Acle Bridge | Fallen in |
| 10/8 | 6 persons rescued following dayboat sinking near Black Horse Broad | Fallen in |
| 19/8 | Female died following incident at Great Yarmouth – trapped under boat | Fatality |
| 30/8 | Female injured leg following fall at Ludham Bridge | Embarkation/Disembarkation |
| 1/9 | Male suffered head injury travelling under Ludham Bridge | Injury |
| 1/9 | Medical evacuation following fall down steps on hire cruiser on Breydon Water. | Injury |
| 2/9 | Female rescued from water at Great Yarmouth Yacht Station | Fallen in |
| 2/9 | Female injured leg jumping from vessel in boatyard | Embarkation/Disembarkation |
| 6/9 | Male drowned after falling from vessel at Loddon | Fatality |
| 9/9 | Female suffered leg injury while mooring at Thurne Dyke | Embarkation/Disembarkation |
| 12/9 | Female injured when falling from vessel at Barton Turf | Embarkation/Disembarkation |
| 15/9 | Male died from injuries after hit by propeller on River Bure near Yarmouth | Fatality |
| 20/9 | Male injured leg falling off vessel while mooring at St Benets | Embarkation/Disembarkation |
| 24/9 | Female injured leg while mooring at Ludham Bridge | Embarkation/Disembarkation |

| 2020 | Incident details | Hazard log category |
|-------------|--|----------------------------|
| 24/9 | 2 persons injured on boat when hit by another boat at How Hill | Injury |
| 27/9 | Female injured leg while mooring at Berney | Injury |
| 27/9 | Male injured leg falling on boat at Stokesby | Injury |
| 27/9 | Male rescued from water after falling from boat at Stokesby | Fallen in |
| 10/10 | Female injured falling down steps on vessel at Horning | Injury |
| 10/10 | Female rescued from water while mooring at Boundary Farm | Fallen in |
| 14/10 | Medical evacuation from vessel – male with breathing difficulties | Medical |
| 23/10 | 2 males and dog rescued from water following dinghy capsize at Rockland | Fallen in |
| 4/11 | Female rescued from river near Thorpe St Andrew after entering water after dog | Jumped in |
| 16/11 | Vulnerable female rescued from water at Wroxham | Jumped in |
| 21/11 | Vulnerable female rescued from water at Wroxham | Jumped in |
| 5/12 | Fatality on board vessel moored at Acle Bridge - suspected suicide | Fatality |
| 20/2 | Body found in water at Bells Boatyard, Brundall – suspected suicide | Fatality |
| 24/2 | Medical evacuation from vessel at Horning | Medical |

Analysis of death/injuries since 1995

| Death | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| No of deaths on or from boats | 3 | 1 | 1 | 3 | 2 | 1 | 3 | 2 | 6 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 4 | 2 | 0 | 2 | 1 | 5 | 1 | 2 | 1 | 5 |
| Reported deaths not related to boating | 4 | - | 2 | 1 | 4 | 4 | 2 | 3 | 1 | 0 | 7 | 2 | 1 | 1 | 3 | 3 | 3 | 8 | 2 | 5 | 4 | 2 | 1 | 2 | 2 | 2 |

| Cause of death | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Severe injury | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| Heart Attack | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 2 | 1 | 5 | 0 | 1 | 1 | 3 | 1 | 1 | 1 | 0 |
| Drowning | 2 | 1 | 0 | 4 | 5 | 1 | 3 | 3 | 5 | 0 | 4 | 3 | 0 | 0 | 0 | 1 | 3 | 2 | 0 | 5 | 3 | 0 | 0 | 3 | 2 | 3 |
| Asphyxiation/C O poisoning | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Terminal Illness | | | | | | | | | | | | | | | | | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Not Known | 4 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 3 | 0 | 1 | 0 | 1 | 2 | 2 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 1 |
| Reports of people inadvertently entering in the water ¹ | 3 | 2 | 4 | 8 | 2 | 5 | 1 | 4 | 15 | 16 | 12 | 23 | 29 | 17 | 34 | 20 | 17 | 18 | 12 | 22 | 19 | 21 | 12 | 23 | 17 | 27 |
| No of persons reported as requiring hospital treatment | 0 | 9 | 8 | 7 | 9 | 8 | 7 | 7 | 18 | 2 | 4 | 13 | 12 | 11 | 22 | 30 | 17 | 15 | 19 | 14 | 13 | 30 | 36 | 49 | 33 | 35 |

¹ Reports where someone inadvertently found themselves in the water. It does not include capsizes of sailing dinghies etc, or from any other contact water sports where entry into the water is predictable

| Nature of injuries | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Head | 2 | 0 | 4 | 1 | 3 | 2 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 5 | 3 | 3 | 1 | 3 | 3 | | 2 | 7 | 3 | 4 | 5 | 3 |
| Arm/hand | 2 | 1 | 6 | 0 | 0 | 1 | 3 | 1 | 1 | 1 | 0 | 1 | 6 | 4 | 1 | 4 | 4 | 2 | 4 | 1 | 0 | 3 | 4 | 6 | 7 | 5 |
| Leg/foot | 3 | 5 | 4 | 2 | 4 | 1 | 2 | 2 | 2 | 2 | 1 | 3 | 7 | 5 | 7 | 8 | 3 | 6 | 4 | 3 | 4 | 9 | 8 | 8 | 11 | 9 |
| Torso, ribs, chest, back | 1 | 0 | 2 | 0 | 1 | 4 | 1 | 1 | 2 | 0 | 1 | 4 | 3 | 0 | 2 | 4 | 2 | 0 | 2 | 2 | 2 | 1 | 5 | 8 | 2 | 2 |
| Not described | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 2 | 1 | 4 | 0 | 0 | 8 | 10 | 2 | 2 | 5 | 1 | 4 | 6 | 12 | 13 | 8 | 10 |
| Asphyxiated/CO poisoning | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 0 |
| Burns/Scalds | 0 | 1 | 1 | 4 | 1 | 1 | 0 | 2 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 1 | | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| Heart attack | | | | | | | | | | | | | | | | | 3 | 5 | 1 | 2 | 1 | 5 | 3 | 10 | 0 | 4 |

Analysis of fire and explosions since 1995

| Fire and explosions | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Number of incidents | 7 | 2 | 5 | 4 | 6 | 3 | 4 | 2 | 2 | 0 | 2 | 22 | 8 | 4 | 4 | 3 | 3 | 1 | 1 | 1 | 0 | 2 | 2 | 5 | 1 | 2 |
| Vessels involved (Private) | 5 | 1 | 3 | 4 | 3 | 2 | 2 | 2 | 1 | 0 | 1 | 18 | 10 | 4 | 2 | 2 | 2 | 1 | 1 | 3 | 0 | 1 | 2 | 5 | 1 | 2 |
| Vessels involved (Hire) | 3 | 1 | 2 | 0 | 3 | 1 | 2 | 0 | 1 | 0 | 1 | 4 | 1 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Prime cause LPG | 2 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Prime cause Petrol | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Prime cause Electrical | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| Prime cause Other | 3 | 2 | 2 | 1 | 5 | 1 | 2 | 0 | 0 | 0 | 1 | 21 | 4 | 2 | 2 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 3 | 1 | 2 |
| No of vessels total loss | 3 | 1 | 2 | 0 | 1 | 2 | 2 | 2 | 0 | 0 | 0 | 20 | 6 | 2 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 |
| No of injuries from fires requiring hospital treatment | 2 | 0 | 1 | 3 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| No of fatalities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |