

# Independent Review of **Open Water and Flood Rescue** in Scotland

A report for the  
Minister for Community Safety

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## CHAPTER 1: ACKNOWLEDGEMENTS

This review was completed within the relatively short timescale of five months. That this was achieved is in large part due to the industry, professionalism and commitment to public safety of those whose views I sought and to whom I am deeply grateful for sharing their experience and expertise so generously.

In thanking all those who responded to the consultation or who contributed carefully considered thoughts and suggestions, I would like to mention a few individuals who were of the greatest assistance to me in reaching my conclusions:

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Members of my Advisory Group:

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Saul Gardiner	Scottish Federation for Coarse Angling
Waveney Crookes	Royal National Lifeboat Institution
Peter Cornall	Royal Society for the Prevention of Accidents
Alfie Ingram	Mountain Rescue Committee of Scotland
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Richard Haigh	Chief Fire Officers' Association Scotland
Andy Coueslant	Chief Fire Officers' Association Scotland
Kathy Cameron	Convention of Scottish Local Authorities
Alistair McNab	Health and Safety Executive
Peter Wade	British Waterways
Jason Burns-Sweeney	British Waterways Scotland

The conclusions and recommendations in this report, together with any errors of fact that might remain, are my own.



Scottish Borders  
November 2009

## **CHAPTER 2: INTRODUCTION AND TERMS OF REFERENCE**

Scotland has a high number of significant bodies of still water and rivers in proportion to its land area, all of which are of great ecological, scenic and recreational value. Together they represent a resource of exceptional importance to the Scottish economy.

There are many stakeholders in the use of inland waters, including the public, private and third sectors, as well as a wide range of sporting bodies and individuals who use the waters and surrounding land for a range of recreational activities.

As in the marine environment, navigational mishap, extreme weather events, and errors of judgement can quickly place individuals at extreme risk – sometimes with fatal consequences following in a matter of minutes.

Expressing his expectation that Scotland should have a coherent understanding of the risks arising from its inland waters and be able to ensure an appropriate level of co-ordinated preventive measures and proportionate provision of rescue capability, Fergus Ewing MSP, Minister for Community Safety in the Scottish Government, provided Paddy Tomkins QPM, formerly Her Majesty's Chief Inspector of Constabulary for Scotland, with terms of reference to conduct a short-term independent review and to report with options and recommendations for change.

### **Terms of Reference**

To review and advise on:

- The resources and capabilities of all agencies currently involved in water rescue emergencies, including flooding;
- Whether there is a need for change in current operational arrangements between responders;
- Whether there is a need for a change in the law covering the responders who cover water rescue;
- The level of public awareness and education of the risks associated with open water.

### **Approach**

The terms of reference and the corresponding timescale for reporting have caused this review to focus on policy, practice and capability at strategic and operational levels. The aim of the review was to consider the prevention of, and response to, casualties on and around Scotland's inland waters, or in flood conditions, in partnership with appropriate expert bodies. While I did not investigate individual incidents, I did draw lessons from material available in the public domain and the views of those professionals involved in the recent floodings in Scotland. That said, this review should not be construed as a formal inquiry into any particular event or agency.

This report is not intended to provide a detailed inventory of vessels, equipment and personnel across Scotland. Nor is it intended - or competent - to pass judgement on

the efficacy of the technical detail of training or operating standards. Rather it examines how such standards are agreed, developed, and guided by wider policies, competing priorities and operating constraints. It seeks to establish the degree to which an understanding of the scope and scale of the challenge of effecting water rescue is shared within and between public and non-governmental organisations; how provision of rescue capability is established; and how the balance between local need and national capacity is achieved.

A literature appraisal was conducted, including consideration of applicable legislation, and an invitation to respond to consultation sent to key stakeholders (Appendix A). The launch of the review received widespread coverage in the press and broadcast media through which a public request for views and contributions was made. A webpage was created on the Scottish Government website, introducing the review and again encouraging contributions to a dedicated email address. Meetings were held with key agencies and bodies and visits made to a variety of freshwater locations in Scotland to discuss relevant issues with water users, to assess environmental and topographical factors at first hand, and to witness training and exercising of key rescue skills on the part of the Fire and Rescue Service (FRS) in Scotland.

Mindful of the Minister's repeatedly expressed commitment to wide consultation during and in the light of this report, an advisory group was convened to assist the author in determining the key areas for consideration, in framing the consultative process, and in providing expert and technical knowledge on the subject. They also proved to be of the greatest assistance in offering candid guidance during the latter stages of the drafting of this report. The membership of the advisory group is detailed in the introduction to this report.

As with any area of study, boundaries had to be set on the matters under consideration. Some activities that are a precursor to, or closely associated with, water rescue such as Search and Rescue (SAR) in the sense of the UK-level, primarily maritime-focused activity; forensic body recovery or underwater search following a fatality; and distribution of relief provisions to those isolated by floodwaters. These have, primarily for reasons of time, been excluded from this review. The approach to SAR at a local level and within the interior of Scotland is considered below. I am content that Scotland is fully represented within the UK SAR committee structure and can thus keep the committee apprised of any work proceeding from this report so that it can be successfully integrated within the UK SAR framework.

At an early stage of the review process it became clear that a few simple but key questions were emerging consistently among the relevant emergency services, voluntary bodies and water users:

- Definition of terms: what do we mean by freshwater in this context?
- Who is in charge of water rescue?
- What is the definition of the area of risk?
- What owns the risk?
- What is the scale of the risk when assessed against other priorities?

- Who sets the standards for participation in water rescue?
- How are resources allocated to manage the risk?

It also became clear that the terms of reference could be most effectively addressed by separating the activity of rescue from areas which would in normal circumstances be dry land but which had been inundated by weather, tidal or other catastrophic conditions; and areas of water which are in continuing existence albeit subject to expansion in extreme weather flooding.

This report is structured to address these questions and to reflect the distinction between flood rescue and what became termed by common usage across stakeholders as 'acute' rescue. Terms are defined more extensively below as these too were revealed at an early stage to be subject to confusion.

### **Definition of terms**

It was apparent at the outset that any discussion of the terms of reference would be hampered by the lack of an extant and universally adopted glossary of terms. The first meeting of my advisory group, comprising senior and experienced practitioners in the field, produced a spirited debate on the subject of what, for the purposes of this review, constitutes freshwater, inland water, open water, floodwater and so on. References in legislation, deriving principally from the age of Britain's once large mercantile fleet, tend to address the limits of the sea as they touch upon navigational and similar requirements but, apart from dealing with environmental, riparian and utility or abstraction interests, legislation does not provide a clear denotation of the areas and conditions that require or might potentially require a water rescue capability.

One of the most widely debated questions was where the sea ends and freshwater begins, as such boundaries inevitably present the opportunity for misunderstanding or errors of co-ordination or command and control between agencies with a maritime responsibility and those that have a landward responsibility. Even in using the term 'landward' I rapidly found myself in difficulty with some correspondents who thought I meant rural instead of urban environments rather than, as I had intended, distinguishing between the sea and freshwater. The archaic term 'landwater' is no longer in common usage and my use of the term 'freshwater' was also subject to criticism, prompting a debate on the degree to which freshwater can proceed through brackishness to become seawater.

These might seem like frivolous diversions but they do point to the fact that a common usage needs to be developed and adopted. The current (draft) Civil Protection Lexicon, developed through the UK Common Terminology Project, was not judged by my advisory group to have adequately embraced water rescue terms, and in any case awareness of the project was extremely limited in the wider community of responders let alone the general public. I will deal later in this report with recommendations on structures for developing work on water rescue but even at this early stage. I recommend (**Recommendation 1**) that water rescue and relevant geographical terms be included within the draft Civil Protection Lexicon and this resource be more effectively promulgated throughout Scotland and the wider UK. The Lexicon should be developed with a view to interoperability with agencies

from outside Scotland and so any terms that might be subject to being misconstrued should be avoided.

For the purposes of this review, and without prejudice to any future glossary of terms, I have adopted the following working usage:

- **open water** - any loch (other than a sea loch), lochan, river, burn or stream, canal, mill race or pond, reservoir, water-filled quarry or other industrial working, stank, open drainage channel or ditch, open well or settling pond (other than an agricultural slurry pit).
- **freshwater** - any water not being the sea, including lagoons, and upstream of the highest tidal reach of a river or any other agreed and publicised landmark on a river.
- **floodwater** - the temporary covering by water from any source of land not normally covered by water.

## **CHAPTER 3: THE STRATEGIC CONTEXT**

The requirement for a water rescue capability can only be understood in the strategic context of Scotland's climate, topography, economic, social development, and the responsibility of Scottish national and local government to allocate limited resources to manage a wide range of risks and demands.

### **Climate and geography**

Scotland's climate is generally cool, wet and oceanic in nature, influenced by the North Atlantic Drift, with few extreme variations or exceptional weather events when judged against the tornadoes, hurricanes, droughts or widespread floods experienced elsewhere in the world. However, the wet climate sustains Scotland's more than 27,000 lochs, over 11,800 km of coastal water and more than 120,000 km of rivers and streams, providing many hectares of often deep or swiftly moving water to which the public have easy access: 90% of the standing volume of freshwater in the island of Great Britain lies within Scotland. Even within the generally temperate climatic range periods of intense rainfall can produce localised, life-threatening and damaging flooding as watercourses are unable to drain surrounding land sufficiently quickly. These events can be aggravated by tidal and/or wind conditions.

While there is much academic and political debate about the nature, rate and implications of climate change, there is a consensus among scientists that continued sea-level rise is now inevitable, that it will progress more quickly than previously believed and that it will continue for some thousands of years. Rising sea-levels will impact directly on a whole range of public policies, from planning to agriculture, but for the purposes of this review it is reasonable to assume that the flooding of land will become an increasingly frequent event with a wider number of communities affected. The majority of the population of Scotland is located within the urbanised central belt where there is immediate access to major lochs, rivers and other waterways. The transport infrastructure facilitates access to the more extensive and remote waters of the Highlands and Islands, for purposes of recreation. Water-sports enthusiasts from across the world travel to Scotland, making a very significant contribution to the Scottish economy in the process. In short, no-one in Scotland is ever very far from potentially hazardous bodies of water.

### **Water rescue**

In contrast to the history of the development of measures for accident prevention and rescue at sea, exemplified by highly respected and well-established organisations such as the Northern Lighthouse Board (NLB), the Royal National Lifeboat Institution (RNLI) and the Maritime and Coastguard Agency (MCA), there is not a comparable history of evolution in the inland freshwater or floodwater environment.

### **Maritime rescue**

Search and rescue at sea developed primarily as a response to the needs of commercial shipping, including the fishing fleet, and has grown to include the needs of the increasing numbers of people using the sea for recreational sailing, boating,

diving and other sports. By contrast, losses of life in freshwater are infrequently associated with the foundering of a major vessel. Smaller craft used on inland water (other than commercial passenger boats since the *Marchioness* disaster), are not subject to the same extensive regulatory framework as those used at sea and tend not to benefit from the communications, navigational and life-preserving equipment familiar to commercial shipping and larger recreational craft at sea.

Scotland's freshwater environment does not have the rescue coverage provided by national (UK) public sector and non-governmental (NGO) organisations in the maritime environment. Where provision does exist it is often local in nature and event-driven in that it is primarily supplying a service to a particular constituency or in response to certain historical events. Provision is not determined or motivated by an over-arching strategy or national objective such as, for example, the RNLI's determination to provide rescue coverage, in all weathers, to any point up to 100 nautical miles from the coastlines of the United Kingdom and the Republic of Ireland.

The UK Search and Rescue Framework has been developed through experience over many years and embraces HM armed forces, statutory agencies, commercial interests and the voluntary sector in a way that is not apparent in the freshwater environment. It provides for a national (UK) body to have overall responsibility for co-ordination of search and rescue at sea – the Maritime and Coastguarding Agency and provides a degree of clarity in terms of relationships between interested parties, the development of strategy and the technical specification of vessels, communications and other equipment that is again absent in the freshwater environment.

The consideration of rescue capability other than in the maritime environment was brought into sharp focus by the *Marchioness* disaster on the Thames at Westminster in August 1989. Lord Justice Clarke's subsequent report, completed over 10 years later, made more than 40 recommendations to improve river safety but only in relation to the specific reach of the Thames subject to his inquiry. While it was of course open to authorities and organisations around the UK, having an interest in river or other water safety, to extrapolate learning for their own region or sphere of influence it is unclear how this was pursued, if at all, in Scotland.

Although the MCA and the RNLI in particular do have some presence and operational responsibility inland from the sea, notably in the Caledonian Canal system, the tidal reaches of the River Thames (a direct consequence of the sinking of the *Marchioness*) and Lough Neagh, it became clear during the course of the review that these bodies too experienced occasional uncertainty over lines of demarcation between the maritime and freshwater environments and would value more explicit definition of terms and the agreement of boundaries between maritime and land-based authorities when dealing in particular with the lower reaches of rivers, estuaries and lagoons. However, there are examples of good practice in Scotland to which I shall return at a later stage in this report.

## **Resources**

It is a truism to say that the provision of any public service brings with it real and opportunity costs for the agencies or organisations concerned. In conducting this

review I have been mindful of the pressures on public authorities in particular, the difficult trading conditions for private sector users or suppliers of services on Scotland's freshwater, and the burden on charitable and voluntary organisations as public donations and other sources of funding are constrained by prevailing macro-economic conditions. I have therefore sought to avoid giving counsels of perfection or making recommendations that would place increased pressure on the public purse. Despite this self-imposed constraint I explore in this report opportunities for improved service delivery, together with economies through rationalisation, collaboration and more effective governance.

### **Social change, flooding and water use**

It is not within the ambit of this review to determine whether or not climate change is a demonstrable causal factor in major flooding events in Scotland and the wider UK in recent years but it is the case that a series of wet summers has provided examples of locally widespread flooding which has had a profound effect on lives, livelihoods, homes and businesses. The costs of lost production and insurance payments have been very considerable. These costs are inevitably defrayed through the action of the market in the wider economy and so wherever flooding has actually occurred it is true to say that everyone in the UK has been affected to a greater or lesser extent by the impact.

The Scottish Government's document *Preparing Scotland* quotes scientific studies as suggesting that patterns of flooding would change over the next 50 years in the UK leading to:

- increased river flows and flood risks in lowland valleys during winter months
- increase in land area covered by 1 in 100 year fluvial indicative floodplain map
- the emergence of a winter flood season with high river flows prolonged periods derived from higher groundwater or run-off
- changes in the pattern of flooding in other seasons

The current hiatus in the construction industry, born of the economic recession, should not conceal the fact that the long term trend has been towards greater urbanisation, the building of more homes to accommodate an increase in the number of single person households and, consequently, greater encouragement to maximise land use in or near existing settlements. These and other factors have served to exacerbate pressures on natural or engineered drainage systems and thereby have exposed a greater number of people and properties to risk when low lying areas are inundated as a result of such systems being overwhelmed.

Despite the currently difficult economic climate it is beyond doubt that the time available for leisure, the public appetite for the enjoyment of Scotland's splendidly diverse countryside, and the ever-widening scope of water sports has brought many more people to enjoy and profit, in all senses, from the country's rivers, lochs and other bodies of water. Along with Scotland's international reputation for excellent angling that has been built up over more than two centuries, newer sports and pastimes such as sailing, rowing, canoeing, kayaking, white water rafting, canyoning, snorkelling, diving or simply walking along the riverbank or shoreline, are all making

a very considerable contribution to the economy of Scotland as well as inevitably exposing a greater number of people to real but, I believe, manageable risks.

As with Scotland's mountains, the challenge for this review is to consider how best to help people enjoy a peerless natural resource while minimising risk, primarily through a sensible preventative approach. Scotland's mountain rescue teams offer an example of great humanity, selflessness and technical expertise but they, as valued contributors to this review, have emphasised that they are encouraged by a situation whereby mountain casualties have reduced at the same time that access to the mountains has increased. I take very seriously the view stated by many experienced rescuers that the best rescue is the one that does not have to be mounted and that concentration on advice and education is proving beneficial. As one rescuer put it to me rather pithily: 'The mountains are perfectly safe as long as you remember how dangerous they are.' The same must apply to Scotland's inland waters.

### **The risk in context**

It is always invidious to compare the impact of one tragedy with another. To the bereaved suffering loss through accident rather than illness, the focus will be on how a loved one died, whether that loss could have been prevented through precaution or rapid response. It is greatly to the credit of many who have lost a family member or friend in Scotland's waters that they have, in dealing with their own grief, looked beyond their own pain to work tirelessly to improve water safety and thereby preclude others suffering in the way that they have experienced. I will return to an example of these commendable efforts later in this report.

While mindful of and sensitive to individual loss, Scottish Ministers and the leaders of public authorities in Scotland have a duty to consider how best to allocate limited public funds to mitigate risk across all forms of human activity. To do so they must necessarily consider the relative incidence or probability of death or serious injury occurring in a range of contexts – in the workplace, on the roads, on the mountains, on or in the water and so on – and develop policies, apply legislation and devote resources accordingly. To do so requires consistent and reliable statistical information that is shared and agreed between government, relevant agencies and, I believe crucially, made easily accessible to the public to inform and educate.

In asking some basic questions as to the incidence of death by drowning in Scotland's freshwaters, the geographical spread, and the circumstances of the loss – whether as a result of a vessel foundering, falling or jumping into water from the land or from a serviceable vessel, losing footing while in the water, etc. - I quickly found that the consistency and clarity of information I sought, and that any inquiring member of the public deserves, was lacking.

I tried to establish answers to the following questions:

- The total number of calls requesting a rescue response on Scottish non-maritime/flood waters, including false alarms (*other than demonstrably malicious calls*);

- The total number of incidents of death or injury on Scottish freshwaters, including those where a rescue response has not been requested/deployed. These should be categorised by deaths, serious injury, minor injury;
- Is there a profile of the seasonality of incidents?
- Locations of incidents?
- Long term trends in the rate of incidence of drownings in freshwater?
- Estimates of the numbers of people using Scottish freshwaters for recreation?
- Taxonomy of locations: public access (non-regulated), public access (regulated - e.g. National Parks), private waters, and any discernible effect of the Outdoor Access Code?
- Is there information on casualties by freshwater type: loch, river or man-made bodies of water (*canals, gravel workings, former mines...*)
- What are the chances of a water incident resulting in death compared to other activities ?
- Does Scotland have a rate of incidence of drowning in freshwater comparable to elsewhere in the UK?
- Is there any evidence of varying recording practices between agencies that serves to compromise the integrity of the data?

An academic study completed in 2006, *Drownings in Scotland; the real story*<sup>1</sup> produced a database of drownings for the previous seven years, drawing on information from a range of agencies, and suggested protocols for how more reliable statistics to provide an accurate picture of the incidence of drowning in Scotland could be collated and analysed on an annual basis. Unfortunately, judging by responses to consultation and the information considered by this review, the study has not reached a sufficiently wide audience or imposed itself on the consciousness of the Scottish Government or relevant public authorities. I find this disappointing as the study makes specific mention of the Scottish Accident Prevention Council (SAPC) which comprises many of the agencies key to providing the data referred to.

The most obvious sources of data on drownings or the number of rescues mounted in freshwater seemed to me most likely to be obtained from the Scottish fire and rescue service (FRS), the Scottish Police Service, General Register Office for Scotland (GRO), the Royal Society for the Prevention of Accidents (RoSPA) and the National Water Safety Forum (NWSF).

I found that the fire and rescue services of Scotland have not been required to collect and submit for central collation data on the water rescue incidents that they attend. However, under a new data collection system, introduced throughout the UK in April 2009, they will be reporting all incidents that they attend, including water rescues. Individual fire and rescue services also hold incident data in a risk assessment modelling toolkit, though this data is subject to some caveats in that information supplied by individual brigades may have been categorised in different ways, e.g. FRS response to a suicide by drowning might have been categorised as a 'water rescue' response, or that pumping out flooded premises might also fall within the 'water rescue' category.

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<sup>1</sup> *Drownings in Scotland: the real story*, Sharp B and Saunders N, Department of Sport, Culture and the Arts, Faculty of Education, University of Strathclyde, pub'd International Journal of Injury Control and Safety Promotion, vol. 4, issue 13, December 2006.

From the data I was able to consider, including Scotland-wide data prepared for the Community Fire Safety Study, I concluded that on average over recent years, the FRS in Scotland attends almost 200 water incidents involving around five public fatalities, 16 public casualties and 30 public rescues. I have been unable to determine long-term trends for the FRS as a whole in Scotland because of the inconsistency in the collection of data over a period of years and certainly prior to the year ending 2007. Importantly, when seeking to put water-related risk and the demands on responders in context, it appears that from 2005 to 2007 water rescues comprise less than 1% of all incidents attended by any Scottish FRS in a given year.

The eight police forces in Scotland are moving towards adopting the same command and control ICT system but current practice does not automatically identify an incident to which the police respond as relating to water or involving water rescue. Equally police data are not routinely cross-referenced against other responders, such as the FRS or the Scottish Ambulance Service so the risk of duplication cannot be discounted. Improved analytical tools will allow the more effective extraction of such data but it is not routinely or comprehensively practised at present. In common with the FRS, police data is largely compiled and analysed on a financial year basis.

General Registers Office for Scotland (GROS) collates water fatality data on a calendar year basis, making it difficult to compare and contrast with data from the responders mentioned above. A distinction is made between those that occur as result of accidental drowning and submersion while in the water, e.g. swimming or wading, and those that result from an accidental fall into water. In both cases GROS refers to 'natural water' and employs two further classifications: 'unspecified drowning and submersion' and 'assault by drowning and submersion'. GROS helpfully puts into context the number of accidental drowning compared to those that have an underlying cause classified as intentional, self-harm or event of undetermined intent:

**Table 1: GROS Data on Water Fatalities**

<b>CAUSE OF DEATH</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>TOTALS</b>
<b>ACCIDENTAL DROWNING &amp; SUBMERSION</b>						
Drowning & submersion while in natural water	6	3	3	4	5	21
Drowning & submersion following a fall into natural water	2	1	2	2	4	11
Unspecified drowning & submersion	3	7	3	2	6	21
Assault by drowning & submersion	0	1	0	0	0	1
<b>TOTALS</b>	<b>11</b>	<b>12</b>	<b>8</b>	<b>8</b>	<b>15</b>	<b>54</b>
<b>UNDERLYING CAUSE CLASSIFIED AS INTENTIONAL, SELF HARM OR EVENT AS UNDETERMINED INTENT</b>						
Drowning & Submersion	79	70	82	72	86	389
Jumping from high place <sup>2</sup>	52	50	78	46	70	296
<b>TOTALS</b>	<b>131</b>	<b>120</b>	<b>160</b>	<b>118</b>	<b>156</b>	<b>685</b>

<sup>2</sup> Figures dependent on cause of death recorded.

RoSPA kindly provided figures in relation to drownings but it should be noted that the data in the tables below are collated by RoSPA from a wide range of sources, including media reporting and reports from Coroners and Procurators Fiscal. As such, the data should not be considered as complete and is not as robust as the data from GROS. RoSPA have advised me that they no longer collate data on the total number of water incidents and they are not aware of any other organisation which collates and publishes this data given, as they see it, the complexity involved. In any case, it is readily apparent that the figures are at variants with those displayed above.

**Table 2: ROSPA data on Drownings Incidents: Scotland (Inland Water Only)**

	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Canal	3	3	7	7	3
Well	1	0	0	0	0
Loch	16	5	14	7	11
River	21	15	47	27	15
Unknown	0	0	6	0	0
<b>TOTAL</b>	<b>41</b>	<b>23</b>	<b>74</b>	<b>41</b>	<b>29</b>

**Table 3: RoSPA Data on Drowning Incidents: Scotland  
(All Categories – By Age)**

	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>TOTAL</b>
<b>0-9</b>	1	4	2	0	2	<b>9</b>
<b>10-14</b>	3	2	1	1	4	<b>11</b>
<b>15-19</b>	4	5	3	6	2	<b>20</b>
<b>20-24</b>	7	4	10	8	5	<b>34</b>
<b>25-29</b>	5	3	3	2	1	<b>14</b>
<b>30-34</b>	6	5	8	3	4	<b>26</b>
<b>35-39</b>	8	7	8	6	5	<b>34</b>
<b>40-44</b>	3	5	7	12	4	<b>31</b>
<b>45-49</b>	4	2	9	5	1	<b>21</b>
<b>50-54</b>	5	3	4	6	4	<b>22</b>
<b>55-64</b>	10	2	6	10	8	<b>36</b>
<b>65-74</b>	4	4	14	2	6	<b>30</b>
<b>75+</b>	5	4	3	4	1	<b>17</b>
<b>Unknown</b>	3	1	37	3	3	<b>47</b>

**Table 4: ROSPA data on Drownings Incidents: Scotland (All Categories)**

	2003	2004	2005	2006	2007	TOTALS
Canal	4	3	7	7	3	24
Bath	1	10	5	1	0	17
Well	1	0	0	0	0	1
Sewage Pipe	0	0	0	0	1	1
Loch	16	5	14	7	11	53
Public Pool	1	2	1	0	1	5
River	21	15	47	27	15	125
Sea	24	16	35	26	19	120
Unknown	0	0	6	0	0	6
<b>TOTAL</b>	<b>68</b>	<b>51</b>	<b>115</b>	<b>68</b>	<b>50</b>	<b>352</b>

Lastly, the National (UK) Water Safety Forum collates figures for the UK as a whole but these are not disaggregated by constituent country or region. Their figures are a result of collaboration between NWSF members and represent their best efforts at outlining the level of water related fatalities occurring in the UK. Due to the fact that the majority of drowning events are not witnessed, NWSF understandably cannot guarantee that their figures are free from double entries and are purely intended to inform debate on matters of water safety. In light of these significant caveats I have not sought permission from the NWSF to show their copyright figures here but the difficulty in determining reliable data across agencies is again demonstrated clearly.

The NWSF has been leading work, supported by the Department of Transport, to develop a more effective online reporting system to populate a database that will record, death, injury, accident and near miss incidents on or relating to water. The system will be launched in November and it is important that, once assessed as practicable by Scottish Resilience, all relevant agencies in Scotland play their full part in reporting incidents that come to their attention.

It would appear from the short exercise allowed for by the timescale of this review that a consistent, multi-agency suite of quality assured quantitative data on inland water rescue incidents does not exist. Consequently I have been unable to answer to my satisfaction the few straightforward questions I rehearsed above.

From the data that are relatively easily available, the following conclusions can be drawn:

- Water rescues comprise less than 1% of all incidents attended by any single Scottish FRS
- The total number of annual accidental drownings in Scotland (which average around 10 each year) is low compared to other risks placing demands on responder agencies, such as Road Traffic Collisions (which average around 330 each year).

- Despite the low numbers, it would appear that the SFRS are only attending, at most, around half of the accidental drownings which occur annually in Scotland.

There will be a number of reasons for the last, including the lack of a 999 call in single isolated accidents; or co-ordination following a 999 call, which may result in another blue-light service attending the incident. This latter point is addressed below.

I believe it to be self-evident that it is impossible to develop an effective strategy, or allocate appropriate resources within and across agencies, to provide appropriate freshwater rescue capability in Scotland without soundly based appreciation of the scope and scale of the challenge to be addressed. Reliable statistics are fundamental in reaching such an understanding and they are patently lacking under current arrangements.

I recommend (**Recommendation 2**) that Scottish Ministers require officials of the Scottish Government to form an appropriately representative working group to establish a mechanism for recording complete details of drownings, water-related casualties and rescue incidents in Scotland on a business year basis, and to determine how this should engage with the system developed by the NWSF. In doing so, I would urge the Scottish Government to consider, in addition to placing a requirement on public authorities, a means by which voluntary, sporting and other relevant organisations can report incidents on a voluntary basis even where no demand has been placed on responder agencies. This will be made easier if there were an official within Scottish Resilience designated as having lead or portfolio responsibility for water safety matters in Scotland.

## **Key Documents**

In conducting this review I have, in recognition of my terms of reference, examined existing legislation that I regard as relevant to the subject of water rescue. I have also, as in the case of Lord Justice Clarke's report cited above, sought to draw on the previous inquiry reports and their recommendations. It is not my intention to repeat them here but it has been of interest to me to see how such reports have been acknowledged and responded to in the Scottish context. I have already said that it is hard to discern how Lord Justice Clarke's recommendations have been drawn upon in Scotland but more recent events and reports have, I am pleased to note, received more methodical attention and have galvanised a more clearly structured response.

## **Legislation, Guidance and Reports**

### **The Civil Contingencies Act 2004 (CCA)**

Following catastrophic events such as the 9/11 terrorist attacks in the United States (2001), the widespread outbreak of foot and mouth disease in the UK (2001) and a number of significant flooding episodes the UK Parliament enacted the Civil Contingencies Act 2004.

The Act provides, in the words of the Cabinet Office, 'for a single framework for civil protection in the United Kingdom capable of meeting the challenges of the 21st century'. The Act is separated into two substantive parts: local arrangements for civil protection and emergency powers. The Contingency Planning (Scotland) Regulations 2005 describe how the provisions of the Act are to be implemented in Scotland.

Part 1 of the Act, supporting regulations and statutory guidance on emergency preparedness establish a clear set of roles and responsibilities for those involved in emergency preparation and response at the local level. The Act divides local responders into two categories, imposing a different set of duties on each. Those in Category 1, are those organisations at the core of the response to most emergencies (e.g. emergency services, local authorities, NHS bodies). Category 1 responders are subject to the full set of civil protection duties. They will be required to:

- Assess the risk of emergencies occurring and use this to inform contingency planning;
- Put in place emergency plans;
- Put in place business continuity management arrangements;
- Put in place arrangements to make information available to the public about civil protection matters and maintain arrangements to warn, inform and advise the public in the event of an emergency;
- Share information with other local responders to enhance co-ordination;
- Co-operate with other local responders to enhance co-ordination and efficiency; and
- Provide advice and assistance to businesses and voluntary organisations about business continuity management (Local Authorities only).

Category 2 organisations (e.g. Health and Safety Executive, transport and utility companies). These "co-operating bodies" are less likely to be involved in the heart of planning work but will be heavily involved in incidents that affect their sector. Category 2 responders have a lesser set of duties - co-operating and sharing relevant information with other Category 1 and 2 responders. An example relevant to this review would be major utilities and Scottish Water in particular Category 1 and 2 organisations will come together to form Strategic Co-ordinating Groups (in Scotland) based on the eight police areas which will help co-ordination and co-operation between responders at the local level.

Since the CCA was enacted, there was an explicit intention to review it within three years. Given the range of disruptive challenges that have occurred in the intervening years, and the subsequent inquiries such as the Pitt Review (see below), it has been decided that the CCA Enhancement Programme (CCAEP) will be established to take this review forward. The CCAEP has been under way in England for some time and I understand that officials within Scottish Resilience have observer status. Scottish Government will therefore wish to consider what action is required as the findings of the programme emerge.

The objectives of the CCAEP are as follows:

- Assess whether there are aspects of the CCA where original intentions are not being met and develop solutions where these are needed.
- Consider whether the CCA regime needs to be modified to reflect relevant experience and changes in relevant structures which have emerged since 2004.
- Consider how to reflect good practice in the CCA regime to help raise the standards of UK resilience activity.
- Evaluate whether the scope of the CCA should be broadened beyond emergency preparedness to cover other aspects of integrated emergency management.
- Ensure that the CCA framework is effectively aligned and integrated with relevant legislation and policy initiatives.

The provisions of the CCA are directly relevant to and underpin the approach to flood management, the rescue component of which is central to this review. Although the CCA is less directly relevant to individual incidents requiring a rescue capability but not arising from flooding, the capabilities developed for the major emergency can of course be scaled down, to some extent, to provide capability.

Although by no means a formal inspection, I found that the CCA and the regulations in Scotland were well understood across the range of stakeholders and that considerable effort is being expended to ensure an appropriate response at national and local level.

## **Preparing Scotland**

*'Preparing Scotland* provides a framework for civil protection within which the contingency plans of the emergency services, local authorities, health services, government departments and other statutory, commercial and voluntary organisations at local, Scottish and UK level can be prepared. Its purpose is to support preparation and effective response to emergencies that may occur in Scotland.'<sup>3</sup>

The Scottish Government's strategic framework for implementation of the CCA, *Preparing Scotland*, was widely commented on as being clear, straightforward and helpful in its structure, guidance and examples in relation, in particular, to the response to major incidents of flooding.

During the course of my brief review Audit Scotland published their report to the Auditor General for Scotland and the Accounts Commission: *Improving civil contingencies planning* (August 2009)<sup>4</sup>. The report was accompanied by a digest of key messages derived from the report's findings and I urge interested readers of this report to consider it in conjunction with that of Audit Scotland.

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<sup>3</sup> *Preparing Scotland* published March 2006, revised June 2007 by Scottish Government. Its purpose to support preparation and effective response to emergencies that may occur in Scotland.

<sup>4</sup> *The Civil Contingency Planning (Scotland) Regulation 2005* describes how the provision of the UK Act are implemented in Scotland. The Audit Scotland report *Improving Civil Contingency Planning* published 2009 looks at what progress has been made.

It would be redundant to repeat or comment at length on the conclusions of a very helpful document in this deliberately succinct report but I found that Audit Scotland's report had been widely read and positively received. The role of local authorities is of considerable significance in lending impetus to these responses and I will return to their role in SCGs later in this report.

In so far as the report bears on the specific subject of water rescue considered by this report, I would endorse Audit Scotland's recommendations for closer collaboration – a central tenet of *Preparing Scotland* - not just between public authorities and agencies, but with the business community (in this case, for example, represented by bodies such as the Passenger Boats Association), the governing or representative bodies in the recreational or sporting sector and the voluntary sector.

### **Fire (Additional Function) (Scotland) Order 2005; Fire (Scotland) Act 2005**

The Fire (Additional Function) (Scotland) Order 2005 places several specific duties on the FRS, including responding to chemical, biological, radiological and nuclear (CBRN) incidents; search and rescue in case of landslide or the collapse of a building or other structure; serious flooding; serious transport incidents; and the requirement to provide assistance or mutual aid to another fire authority area if requested to do so.

Neither the Act nor the Order impose a similar duty in respect of freshwater rescue other than as a result of flooding. The Order does not define what circumstances would amount to flooding for the purposes of this duty.

The Chief Fire Officers Association Scotland (CFOAS) have argued, during consultation for this review and elsewhere, that the statutory duty imposed on the order should be extended from the requirement to provide a rescue service for flooding to encompass all rescues from freshwater in Scotland. I address this assertion when I discuss the capabilities of key agencies below.

### **Police (Scotland) Act 1967**

The Police (Scotland) Act 1967 is now rather dated and less than exact in some of its language. The Act does not make specific reference to the duties of the police service in respect of water rescue but in outlining the general functions and jurisdiction of constables who are members of a police service it includes the following:

S.17 - (1) Subject to the provisions of this Act, it shall be the duty of the constables of a police force -

- (a) to guard, patrol and watch so as –
  - (i) to prevent the commission of offences;
  - (ii) to preserve order, and
  - (iii) to protect life and property.

Several times during the course of my review I found that the latter duty 'to protect life and property', was cited as the rationale for the police assuming the role of overall co-ordinator of emergency response in any major incident, natural disaster or - relevant to this review - search for missing persons. This was not just on the part of the police themselves in terms of the co-ordinating role but was actually referred to by some respondents as justifying the belief that water rescue must be the statutory responsibility of the police because of the above provision and (by implication) not the responsibility of their own authority or agency.

The provision is addressed to constables, not to police forces in the same way that the Fire (Additional Functions) (Scotland) Order 2005 places a duty on the Fire and Rescue Service rather than individual firefighters, and it seems to me that this construction places a burden on the wording of S.17(a)(iii) that the legislators never intended it to carry. If interpreted in this fashion for every condition or eventuality that might endanger human life the police service would be overwhelmed. It is no more logical for the police to be specially equipped to have a water rescue capability than to have a paramedical capability to cope with medical trauma. Indeed, constables probably find themselves more frequently faced with the latter eventuality than the former.

My purpose at this stage is not to discuss at length the role of the police service in this context but to assert that the Police Act (Scotland) 1967 does not provide a firm basis for some of the constructions that have been placed upon it. I state my conclusions and recommendations on the role of the police service in relation to water rescue later in this report.

### **Health and Safety at Work Act 1974 (and subsequent orders)**

This legislation sets out the requirements and liabilities of employers for safeguarding their employees when the latter are working on or near water; the responsibilities of employees working on or near water; and the responsibility of employers or the self-employed to third parties, e.g. their customers or onlookers, who might be at risk as a result of the work of or services offered by. These provisions are self-evidently beneficial in reducing the risk of accident – and any consequent need to mount a water rescue – and in protecting the interests of rescuers themselves.

I consider the legislation as it stands to be clear in its provisions and not in need of any change for the purposes of improving water safety in Scotland. The degree to which it is understood, adhered to and enforced is a somewhat different matter.

Perhaps of greatest concern to me in speaking to a wide range of people working on or having an interest in safety relating to Scotland's waters was the degree to which the idea of 'Health and Safety' has entered the popular consciousness as a hindrance to, for example, making provision for a safety boat or modest rescue facility rather than as facilitating such public-spirited action. An erroneous belief seems to have developed that any well-intentioned provision or action could, if less than perfect in its execution and effect, render the person or organisation concerned liable to dire penalty under the law. This cannot be in the interests of furthering safety in any medium.

I found representatives of the Health and Safety Executive (HSE) to share my anxiety that this misinterpretation of the law results in the perfect standing in the way of the good. It is clear from the HSE's website and other publications that they have worked strenuously to debunk what has become an 'urban myth', offering a wealth of helpful information and advice on compliance and accident prevention. They need to continue to be supported in their efforts in this regard and I recommend that a representative of the HSE be included as a member of any national group (**Recommendation 3**) tasked by Scottish Ministers with responding to this review.

## Key Reports

Of fundamental and direct relevance to this review are the separate reports prepared by Sir Michael Pitt<sup>5</sup> and Sir Ken Knight<sup>6</sup> following the widespread flooding that occurred in the north and south west of England in the summer of 2007.

Sir Michael and his inquiry team were reporting to secretaries of state after 10 months of work on a series of floods that, taken together, amounted to the most costly episode of flooding in the world in that year. To quote the report:

*55,000 properties were flooded. Around 7,000 people were rescued from the flood waters by the emergency services and 13 people died.*

*We also saw the largest loss of essential services since World War II, with almost half a million people without mains water or electricity. Transport networks failed, a dam breach was narrowly averted and emergency facilities were put out of action. The insurance industry expects to pay out over £3 billion – other substantial costs will be met by central government, local public bodies, businesses and private individuals.*

The Pitt Report, although focused on circumstances in England, addresses what might be termed the whole life-cycle of flooding, from flood prevention measures to prediction, preparation, response and aftermath. In Section 4, *Being rescued and cared for in an emergency*, he makes recommendations for more effective collaboration between the emergency services and other responders, and for the gathering and provision of better information to facilitate decision making in crisis conditions.

In conducting this review I was impressed and encouraged that the Pitt Report had clearly been read, digested and acted upon by the Scottish Government's Scottish Resilience Team, the relevant emergency services, local authorities, the utilities and key stakeholders. The relevant officials of the Scottish Government have a good working relationship with their counterparts in Department for Food, Environment and Rural Affairs (DEFRA) and I am content that work in the Scottish Government is progressing at a pace commensurate with that south of the border.

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<sup>5</sup> Sir Michael Pitt's review of the flooding emergency that took place in June & July 2007. The final report *Lessons Learned from the 2007 Floods* was published June 2008.

<sup>6</sup> Sir Ken Knight, The Chief Fire & Rescue Adviser's review of the operational response by the fire and rescue service to the widespread flooding in England in 2007. *Facing the Challenge* was published March 2008.

The report has also been discussed and responded to within Strategic Co-ordinating Groups (SCG) although it would be premature to suggest that all recommendations have been met. The Report has, in sum, reached a wide audience and has driven positive change at national and local level within Scotland. I found no dissent from the report's recommendations and everywhere examples of activity to meet them.

Consequently I do not intend to echo or repeat Sir Michael's cogent conclusions and guidance, beyond observing that they remain current and I urge continuing diligence at all levels in Scotland in order to comply with them.

As Chief Fire and Rescue Adviser to the Secretary of State for Communities and Local Government, Sir Ken Knight's report of the same period focused on the technical capabilities, operational response and direction of the FRS in England in providing and co-ordinating water rescue services appropriate to the extreme conditions of 2007. I will deal later with some of the key points on capability, interoperability and the statutory framework covered by Sir Ken in so far as they apply to the FRS in Scotland but, again, I am pleased to report that officials of the Scottish Government and the Scottish FRS at all levels are apprised of Sir Ken's conclusions and recommendations and acting on them.

I shall endeavour to avoid doing the reader - or its distinguished author - the disservice of quoting or repeating a report that is most helpful and a model of clarity. I suggest instead that it be read in conjunction with this report.

### **A distinction between flood and acute water rescue**

At an early stage in this review it became clear that rescue from flooding presents different challenges and, in some sense, opportunities to emergency responders that do not apply in what my advisory group agreed to term 'acute rescue'.

To a qualified extent, flood management comprises a spectrum of disciplines from meteorology to urban planning, from land management to hydrology, and from rescue to disaster relief. Water rescue forms only a part of a process that runs from planning and prevention to long term recovery and reconstruction.

While by no means seeking to understate the burden on emergency services and the impact on victims of a flood, it is possible to prepare for a response to a flooding event, both in the short and long term, in a way that it is not for individual accidents. Improved weather forecasting, flood risk mapping and the whole range of preparatory arrangements so comprehensively addressed in Sir Michael Pitt's report, enable emergency services to plan a response to a foreseeable event. Personnel can be called to duty, resources deployed to forward or appropriate strategic locations, and command and control or co-ordinating structures put in place in anticipation of major demand. Public safety messages can be broadcast and an array of protective works undertaken to mitigate risk to persons and property.

Rescue in floodwater presents its own particular challenges. The water is likely to be hazardous to health through pollutants as sewerage systems are overwhelmed; it is almost certain to offer no subsurface visibility; it will conceal many submerged hazards such as barbed wire fences, street furniture, and so on; and it may appear

to be still on the surface but subject to powerful subsurface currents and siphoning forces as standing water seeks to drain away or is affected by swollen watercourses. Many, if not all, of the techniques and equipment employed in flood rescue can be employed in normal water, including moving water, but the principal challenge is to be able to project the capability to the scene of an acute rescue in a timely and informed manner.

By contrast, the term acute rescue is intended to encompass those instances where a person is submersed in water (not being the sea or floodwater) and is in need of rescue as a result of falling, jumping or otherwise intentionally or unintentionally entering the water from dry land; or through becoming separated from a vessel for whatever reason. This can happen without warning and anywhere across Scotland. The accident can happen many miles from a centre of population, in difficult terrain or with limited means of mechanised access other than by air. Communications, in all senses of the word, can be difficult or non-existent.

The acute rescue challenge also requires a speed of response from the emergency services' bases to the site that does not benefit from the preparatory period often available prior to incidents of flooding. To put this in context, a person, even a strong swimmer, falling into water at these latitudes will be faced not only with the challenge of maintaining buoyancy but of resisting the debilitating effects of hypothermia. The dangers of hypothermia and the time taken for the effects to become apparent will vary with season, latitude, altitude and the insulating properties of clothing. While many water users will use a buoyancy aid few will wear survival suits of the kind increasingly used at sea. Even in the height of summer Scotland's major bodies of water remain extremely cold beneath the surface and anyone falling into the water with sufficient velocity to pierce the relatively warm surface layer will accelerate the loss of body temperature. Moving water will speed the progress of hypothermia and add the hazard of collision with rocks or other obstructions. Survival in any but the most favourable circumstances can be reckoned in minutes rather than hours.

To effect a rescue the relevant responder must don appropriate clothing and equipment, reach the reported location of the victim(s), assess the most suitable tactics and deploy swimmers or a boat as appropriate. They must then search for and locate the victim, who will probably not be showing more than head and shoulders above the water surface, in what might be a very large body of water. This task will be made harder by any waves or swell on the water, in darkness or poor visibility as a result of adverse weather, or in moving water where the victim might have been washed a considerable distance from the last reported sighting. Air support from HM armed forces might be available but flight times and hover time at scene for helicopters will be determined by the distance from their relatively few bases in Scotland and the north of England.

In sum, all but those acute incidents most swiftly reported (bearing in mind that a significant proportion of such incidents are not witnessed), most proximate to a rescue resource, and occurring in the most favourable of circumstances, will provide the greatest challenge to the provision of an effective organised rescue response.

## **CHAPTER 4: FLOOD RESCUE**

In keeping with the collaborative philosophy of *Preparing Scotland*, Scotland's flood rescue capability chiefly comprises the resources of the FRS supported by some voluntary sector capability.

### **Governance and direction**

#### ***The Scottish Government***

The arrangements for the governance of the development and deployment of flood rescue assets in Scotland are straightforward. The Scottish Government sets out overall strategy in *Preparing Scotland* and should determine national need; Strategic Co-ordinating Groups agree how best to implement *Preparing Scotland* and the requirements of the Civil Contingencies Act within and across the local authorities, police forces, FRS and other agencies that constitute the membership of each SCG.

At present there does not appear to be any national collation of local plans beyond an assurance from the chairs of SCGs to Scottish Ministers that appropriate arrangements are in place. While I understand and support the philosophy that local need can best be understood and met through local arrangements, it must be the case that Scottish Ministers remain primarily accountable and therefore should seek more detailed information from SCGs so they can assure themselves that local arrangements are appropriate and, when aggregated, meet regional or national need.

In the event of a major flood requiring a multi-agency response a local operational co-ordinating group will be set up under the aegis of the relevant SCG, comprising senior representatives from relevant organisations. In the case of particularly severe, multi-location or potentially widespread disruption, the Scottish Government will open the Scottish Government Emergency Room to co-ordinate and support disaster management efforts across the country.

#### ***Strategic Co-ordinating Groups***

The local (within the relevant police area) SCG will be chaired by the head or a senior official from any of the organisations represented and the chair may change during the various phases: preparation, response, aftermath management. Except in highly specialised cases, such as epidemic or pandemic management, it is probable that the group will be chaired by the local chief constable during the emergency response phase of an operation. Where facilities exist and time permits, a joint agency control room, comprising information and communications systems, might be opened.

The role of the SCG is central to the successful local implementation of strategy set out in *Preparing Scotland*. During my discussions with stakeholders and responders around Scotland it became clear that staff at the operational level within Category 1 responder agencies had a variable understanding of the role, remit and authority of the SCG in determining action during an emergency. This goes to the heart of the 'who is in charge?' question and I believe requires further discussion between the

Scottish Resilience directorate of the Scottish Government and representatives of the authorities and agencies comprising the SCGs, principally COSLA, the Society of Local Authority Chief Executives (SOLACE), ACPOS and CFOAS.

I am confirmed in this view by the fact that of the 32 Scottish local authorities invited to contribute their views during the consultative phase of this review only 14 responded. Among those that did respond there was a considerable spread between those that provided a detailed, helpful and carefully considered response and those that had no comment to make at all. It was also illustrative that the authors of responses received occupied different roles within councils, including 'land and environmental services', 'emergency planning officer', 'housing and community services', among others. While this might simply represent different structural nomenclature between councils it does not convey a sense of consistency and shared understanding of the challenge.

In short, for effective co-ordination to take place there must be established some clear executive authority. In the case of an SCG I do not believe this requires legislation but can be achieved by memorandum of understanding (MoU) between constituent authorities, possibly modelled on the example in the Northern Constabulary police area where an MoU is in place between agencies working together to provide rescue response on the Caledonian Canal navigation.

Given the degree of uncertainty regarding the executive leadership role of SCGs that I encountered among stakeholders, I recommend (**Recommendation 4**) that a focus for these discussions should be the clarification, development and more effective promulgation of the 'Responding to Emergencies' section of *Preparing Scotland* so that it meets a widely expressed need for a manual of doctrine and operations for SCGs that sets out the constitutional relationship between the constituent organisations, as well as the responsibilities of each organisation during the planning, precautionary and operational phases of an emergency such as severe flooding. This should assist understanding, enhance operational effectiveness and inform public understanding and expectation as to the question I was asked on several occasions: 'who is in charge?'.

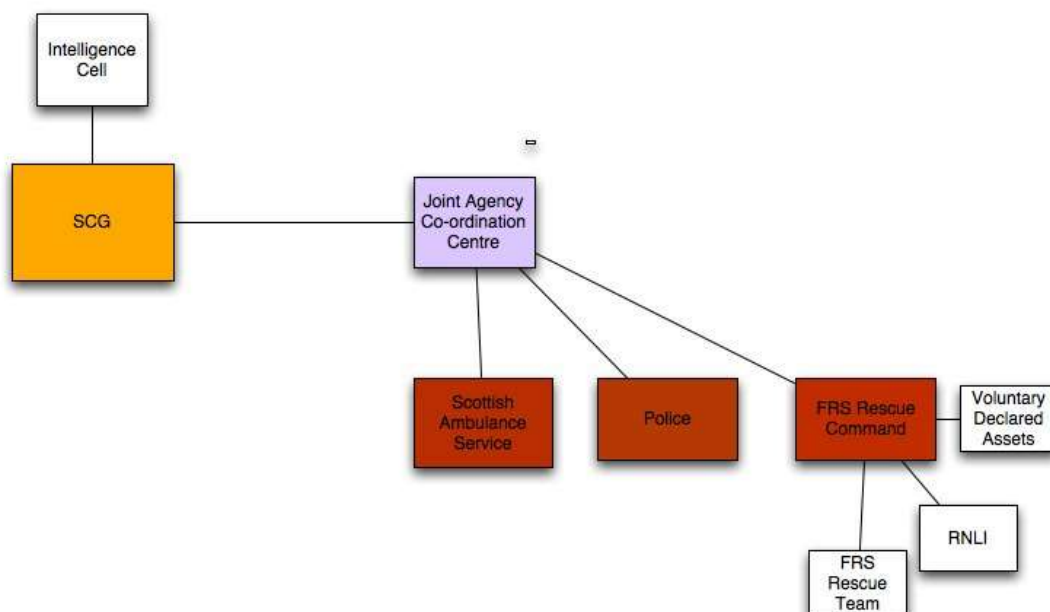
It is probably best to address at this point the case put forward by CFOAS that the FRS in Scotland 'should have the lead role in co-ordinating water/flood rescue efforts within the overall SCG co-ordination arrangements led by the police'. I agree. However, I construe this to mean the co-ordination of rescue assets within the strategy set by the SCG and in accordance with the priorities identified by the SCG according to intelligence received or collated by the police. I have had so many conversations with practitioners on this point that the only thing that is clear to me is that further clarity as to respective organisational roles is required.

My view is that that during the operational emergency phase of serious flooding the SCG would be chaired by the relevant chief constable. This is the current arrangement between operational responders for a wide range of emergencies and I am not persuaded that it needs to be changed in the context of serious flooding. I should stress that I am referring here to the emergency phase of flood management and not necessarily the preparatory or consequence management phases of what can be a significantly extended operation.

The police are best placed and experienced to manage extensive and complex flows of information, to work with a very broad range of organisations including the health and care sectors, to deal with casualty and other requests for information and to manage collateral issues of access, traffic control, to crime and disorder that might arise, and to co-ordinate large area searches where necessary. This does not mean that the police should be directing the deployment and operations of rescue assets at the scene. This is clearly an area of technical expertise in which the FRS is pre-eminent.

In my view, the SCG should set strategy and identify priorities according to information as it develops; the FRS should then deploy and co-ordinate rescue assets to achieve the objectives set by the SCG or any joint agency control room operating under the aegis of the SCG. What should not happen, but apparently does, according to some responders I spoke with, it is for individual agencies to either self-deploy to a site or incident without regard to overall co-ordination structures, or for third party resources to be tasked separately and simultaneously by police and FRS. It would seem that this is less of an issue in those SCG areas where multi-agency exercises are conducted regularly and/or where a Joint Agency Co-ordinating Centre (JACC) exists and is used for a range of events or operations on a frequent basis.

This is not intended to be a definitive but merely a simple, indicative diagram of the structure I have in mind for the emergency rescue phase of an operational response to serious flooding. It is not intended to cut across or contradict work being undertaken within Scottish Resilience to achieve standard operating procedures across SCGs, but is intended to emphasise the point that their work needs to be completed to replace my admittedly highly simplified illustration with a more highly evolved and definitive statement of structures and processes.



I understand that, since our meetings during the research phase of this review, COSLA has initiated meetings with CFOAS and ACPOS to re-visit command and control and co-ordination arrangements, and to establish which will be the lead agency in receiving response to calls for assistance. I commend them for acting with such alacrity in the light of our discussions. However, I feel bound to observe that any shift from the current situation whereby the police receive and co-ordinate a response to calls for help in flooding and acute rescue incidents will have to be dealt with very carefully if the degree of confusion or uncertainty that already exists in the minds of many members of the public is not to be exacerbated.

I remain of the view that the police should remain the co-ordinating agency in all emergency response situations. Water rescue is only one type of urgent service that responders have to provide in a co-ordinated way and it is best to fit this within a universal framework rather than trying to develop different permutations for a considerable number of predictable situations. Also, if one agency is to co-ordinate the response to flooding incidents but another to calls for acute rescue, the point at which incidence and causation transfers responsibility from one service to another can be uncertain and leaves room for doubt and error in mounting the most effective response.

## **Resources**

Assessing the extent of water rescue resources in terms of capacity and capability has been problematic. The freshwater rescue community, if I can use that term, is not presently subject to the same stringent requirements as exercised and overseen by the MCA in the maritime environment. For a sea rescue boat to comply with MCA specifications and be accepted as a 'declared asset' fit for deployment individually, or as part of a wider effort co-ordinated by the MCA, it must meet extremely detailed criteria. The MCA does not have authority to maintain the same regime for rescue assets on inland waters and in any case the technical requirements for rescue boats to be used in the wide variety of freshwater environments will require considerable flexibility, including the ability to be carried by *portage* over land that cannot be accessed by motor vehicles. The same does not apply in the case of freshwater. Thus the police and the FRS find themselves in the invidious position of not knowing whether an asset offered with the best of intentions is actually suitable for the task, whether the operators are trained to an extent comparable to and compatible with that followed by the FRS or, to be blunt, whether it is likely to become a potential burden rather than a help in an emergency situation.

## **The Fire and Rescue Service in Scotland (FRS)**

The FRS in Scotland provides the benchmark by which any other freshwater rescue capability or potential resource should be judged. I will return to this theme in a moment but I will take this opportunity to record how greatly impressed I have been by the professional and meticulous approach of the FRS, including the Scottish Fire Services College at Gullane, to the training and equipping of their water rescue teams across the country, together with their commitment to consistency and interoperability. This was an aspect highlighted by Sir Michael Pitt and I judge it to be greatly to the credit of the Scottish FRS that they have already established a degree of commonality of practice.

I recommend (**Recommendation 5**) that each FRS in Scotland, working under the aegis of their respective SCGs, should be requested by Scottish Ministers, through the relevant Fire and Rescue Boards, to compile a public register of declared water rescue assets in the public, private and voluntary sectors (including individual private persons) to include a clear definition of the capability in each instance.

I also recommend (**Recommendation 6**) that Scottish Ministers should formally acknowledge that, where a Chief Fire Officer is not satisfied as to the safety or efficacy of a capability offered then he or she should be able to refuse to work with that person or asset on operations; and that should a person or persons attempt to participate in a rescue operation in defiance of the direction of the Chief Fire Officer, or his or her junior officer in command of the operation, then the matter should forthwith be reported to the police with a view to the exercise of appropriate police powers under common or statute law to prevent any undue hindrance of rescue operations. I do not believe that a change in the law is required to effect this recommendation but I remain open-minded on the subject.

I further recommend (**Recommendation 7**) that the register of water rescue capability in each SCG area adheres to a common national format to be developed by CFOAS, in partnership and agreement with the Head of the Scottish Fire and Rescue Advisory Unit (SFRAU) and that an annual return be made to the Head of SFRAU so that the national capability can be assessed and published by Scottish Ministers.

In making these recommendations I believe it important to emphasise that I am referring to flood and, by extension, all freshwater rescue capability. I am not extending this to the concept of flood *management* – a much more complex and necessarily multi-agency endeavour - for reasons I have touched on earlier in this report.

In terms of the capability of the FRS itself, Scotland has 14 water rescue teams trained and equipped to common standards and deployed under what the FRS terms a Framework Operational Procedure (FOP). The FOP in each FRS area details significant hazards and risks, key control measures for the mitigation of risk and the optimisation of rescue effort, equipment and safe systems of work and an *aide memoire* for incident commanders at the scene. The FOP also details the stages of training accreditation achieved by firefighters up to the fully capable water rescue team - what is widely referred to as the Team Type approach - to ensure compatibility of equipment and skill within and across FRS areas.

I was fortunate to witness a FRS training exercise conducted by Lothian & Borders FRS in rapidly moving water on the Tweed and was impressed by the measured and professional approach of the trained water rescue team as well as the familiarisation training being given to new firefighters to apprise them of the power and challenges posed by moving water.

I recommend (**Recommendation 8**) that the Team Type approach form part of the basis on which declared rescue assets are admitted to the register to be compiled in each SCG area, as described above, and that the relevant criteria, equipment and

training to maintain the Team Type model at the forefront of development of professional understanding of water rescue techniques and equipment be revised on a Scotland wide basis at least once each financial year and agreed by CFOAS and the Head of SFRAU.

### **FRS Water Rescue Teams**

As my terms of reference require me to consider Scotland's water rescue capability as a whole, I was interested to understand how the figure of 14 teams for Scotland was arrived at, and to appreciate whether it proceeded from a zero-based assessment of need or an allocation of available funds. It would seem that the latter case applies.

UK government consideration of the implications of the terrorist attacks in the US in 2001 led to what became known as New Dimensions (ND) decision/procurement process which ultimately provided FRS in Scotland with a range of CT/CBRN specific equipment and water capability assets including 14 boats. At the time, it was considered that the UK was not fully prepared to deal with a similar large scale, multi-location attack. As a result, work programmes were commissioned across government to identify gaps and enhance resilience.

The then Fire and Rescue Services Inspectorate in Scotland (since replaced by SFRAU) took overall management and responsibility for the programme which was supported through the Capital Modernisation Fund (CMF) with an initial provision of £5m. Year on year thereafter an identified increase to the Fire LA Capital Grant ensured a continued investment stream.

It is difficult to assess the reasons for this change but my judgement is that there was a degree of project creep during that time and the original narrow focus of the programme was allowed to grow into a wider 'wish list' of assets. This resulted in an approach where overall procurement and subsequent asset disposition did not clearly relate back to an overarching plan or needs analysis. At least, I have been unable to discover one if it did exist. This appears to have resulted in several acquisitions where the related risk and consequent steps to mitigate it are not evident. I am, however, much encouraged by the exacting approach to managing this issue demonstrated by Scottish Resilience over the past two years and trust that this will assist in addressing the questions I raise below.

I am not suggesting that the assets procured under the ND programme are inappropriate to the needs of the FRS, or that they are not relevant to the role of the FRS as a provider of water rescue capability, but several questions to arise as to the match of investment to demonstrable risk, the subsequent exercising and/or operational deployment of these assets, and the means by which their development, augmentation or replacement will be managed.

I heard from several members of the FRS across Scotland, of all levels of seniority, that the equipment had had very little use in some areas and that there were challenges in maintaining a suitable number of trained personnel in place to constitute a rescue team at short notice, particularly in considering response to acute emergencies not associated with flooding.

I am also concerned there appears to be no agreed mechanism for funding the replacement of these assets when they reach the end of their design life: whether each Fire and Rescue Board will have to make individual decisions according to their means, which raises concerns over the maintenance of national capability; or whether funding can be agreed between the Scottish Government and, perhaps through COSLA, the local authorities that constitute the Fire and Rescue Boards.

I recommend (**Recommendation 9**) that Scottish Ministers direct an audit of the utilisation and suitability of the FRS water rescue equipment procured to date; request each SCG to reappraise local risk and requirement; and, in the light of the SCG reports, to establish the need for a minimum national water rescue capability requirement, the long term funding arrangements for which should be negotiated and settled between national and local government.

### **The Police**

I deal elsewhere in this report with the established role of the police as the primary co-ordinating agency in times of emergency. This co-ordinating role does not and I believe should not extend to operating a water rescue capability in the sense of the Team Type approach that I have commended in respect of the FRS.

The police presently have a very limited waterborne capability, notably in Strathclyde and Lothian & Borders Police Forces, and that which exists is established for policing rather than rescue purposes. I do not believe there is any case for the police developing a flood rescue capability. The role of the police should continue to act as co-ordinator of other agencies and resources and to facilitate the operations of rescue assets in the flood affected area.

### **The Scottish Ambulance Service (SAS)**

The Scottish Ambulance Service is currently developing a Water Incident Support (WIS) capability to provide a trained pre-hospital medical response to members of the public and other responders in flooding and other water-related incidents. The SAS intends to improve care in challenging situations or in hazardous conditions where no professional healthcare or ambulance support was available previously. Training includes swift water skills and water awareness for different levels of practitioner.

When development of the WIS initiative is complete the SAS will have a team capability at four strategic locations throughout Scotland, capable of individual team response or the provision of mutual aid within Scotland or the UK as a whole.

This valuable work highlights the importance of understanding the many facets of water rescue and the necessity of recognising it to be a multi-disciplinary endeavour. It also indicates the potential benefits of multi-agency training and exercising to cement effective use of these skills in the operational environment.

## **The Voluntary Sector**

Voluntary sector resources range from the large, internationally respected, highly trained and well-resourced rescue organisations such as the RNLI and the British Red Cross, to the more restricted organisations that have become established in response to a particular event, local circumstance, perceived need or individual enthusiasm. Some of these, such as the Glasgow Humane Society, have been established for a very long time (over 200 years in this instance) and have much to contribute from their experience.

Even bodies of the stature of the RNLI grew from modest beginnings and Scotland is fortunate to have so many public-spirited and selfless individuals who wish to make a contribution to the wellbeing of their fellow citizens and visitors to this country. The training, capabilities, equipment and resources of such groups is, understandably, variable but, notwithstanding my recommendations as to the need to establish consistent standards for rescue skills, communications and equipment within the team typing philosophy, everything that can be done to help voluntary groups to meet these standards should be pursued. Determining who they are, where they are and what are their capabilities will be a good start.

The history of the development of mountain rescue teams in Scotland is a useful parallel. It is now entirely a matter of routine for public authorities, such as the police, to call upon the support of mountain rescue teams, for them to work together within an integrated command and control structure, and for responders at the operational level within the police or FRS to understand the expertise that such groups can bring to bear. The same has yet to be achieved in the area of water rescue.

A proper register of declared assets that the police, FRS or other public authority can draw upon with confidence, will enhance rather than diminish the important contribution that the voluntary sector has and wishes to make. The RNLI, for example, is presently (Autumn 2009) investing in additional flood rescue assets to be based in Perth, sufficient to allow for the deployment of two powered boat rescue teams from Perth to anywhere in Scotland. This is in addition to the swift water rescue team based at Kessock, near Inverness.

Some smaller voluntary bodies, such as the Nith Inshore Rescue lifeboat, have already achieved the stringent requirements of the MCA in the maritime environment. There is no reason that the same should not be achievable within a team typing framework in the context of flood or other freshwater rescue.

In drawing up a register of assets it should be remembered that, while not providing a rescue capability, many recreational groups such as canoeists, anglers and others will know local waterways well and can provide valuable support in the search phase of any prolonged search and rescue operation.

## The Private Sector

Although not often associated in the public consciousness with response to relatively localised flooding incident in the UK, there are a number of global companies able to project major items of equipment of high capital worth: heavy lift or high capacity helicopters and high volume pumping equipment; emergency shelter, medical, mortuary and workshop facilities; and earth moving plant. They also offer expertise, personnel and other capabilities for disaster response and aftermath management. I know that officials of the Scottish Government have previously examined the example and experience of other EU states, such as Denmark, in using private sector resources and I recommend (**Recommendation 10**) that Scottish Ministers consider asking officials to provide an updated and detailed options paper, with associated costs, to explore whether offsetting some risk to the private sector at the high end of capital cost or call-off contracts for the provision of specialised equipment might provide value for money for the public purse rather than owning under-utilised equipment in the public sector. I do not have enough data to hand to form a firm conclusion at this stage but I believe the research to be worth undertaking.

## CHAPTER 5: ACUTE RESCUE

I take this opportunity to emphasise that while the techniques and equipment used in flood rescue situations can appear suitable for acute rescue response, or that maritime practices can be simply transposed to the freshwater environment, this is a superficial impression. In reality the planning, logistical challenge and scope of training required for the vast array of types of bodies of water in Scotland, their expanse, depth, temperature, remoteness, swiftness of flow and so on, present enormous and in many cases practically insuperable challenges to the provision of a timely and effective rescue response.

In their response to consultation the Scottish Canoe Association (SCA) summarised the problem admirably:

*‘The consultation [the Review] is attesting to address a very complex issue that is complicated by a wide variation in types and locations of inland water. Every part of the sea is connected, so wherever an incident occurs on the sea, there will always be a rescue vessel that can get to the scene of that incident. Inland water is very different, however, and whilst a place like Loch Lomond, for example, has a number of emergency craft capable of taking part in a rescue, those craft are incapable of responding to nearby lochs such as Loch Arklet.’*

There are, as the SCA and others pointed out to me, so many variables in determining the practicality of providing a rescue response to any given body of water that, while national strategy would be useful in setting out objectives, limitations and a planning framework, there can be no one-size-fits-all solution of the type that people readily associate with the MCA and the RNLI around our coasts. The possibility of providing a rescue response will be governed by the nature of the water and its location, the proximity of centres of population and emergency services (public and voluntary) means of access and so on. River rescue, particularly in rocky gullies, might require roping and swimming skills, whereas a large loch might require vessels capable of operating safely in weather conditions that can produce waves of a height more usually associated with the sea.

I do not believe that any single agency could alone, and with existing resources, provide a rescue service for all inland waters that would be able to arrive at scene, assess the situation, deploy and effect a successful rescue in all circumstances. I would go further and state that, having heard from so many expert and experienced people from across Scotland and beyond, the reality is that it would be impossible to provide a sufficiently timely rescue response to cope with all eventualities, not just to a proportion but to the majority of Scotland’s inland waters. This conclusion is based not just on geography but in the knowledge that, except where a victim is wearing the most sophisticated survival suit, the rapid onset of hypothermia will limit severely the window of opportunity for a rescue to be mounted with success. The best course then is to mitigate risk through preventive measures and to focus on those bodies or stretches of water that can be identified as being high risk and amenable to an existing or potential rescue capability.

If my assessment seems overly pessimistic I would not want it to be construed as a counsel of despair. There is much I have found throughout Scotland that demonstrates how the active engagement of communities, together with the support of local FRS and police, can assess, mitigate and respond to risks in an effective way.

### **Risk assessment and the role of SCGs**

If it is accepted that not all water can be provided with an effective rescue response within the constraints of geography, time and resources, then we should concentrate on establishing those areas that, through records, can be shown to combine the greatest hazard with the greatest number of casualties and devising the most expedient way of managing the identified risk and response at a local level. I believe that while SCGs do not have an explicit remit for risk assessment in this context they are unique as a forum, as far as I am aware, in comprising all the relevant responders and affording the opportunity to engage with the voluntary sector. In particular, the local authority members of SCGs are vital in understanding and representing the interests of local communities.

I recommend (**Recommendation 11**) that Scottish Ministers ask each SCG to extend their work on community risk register to encompass the bodies of water in their respective areas and to set up working groups at such level as they think appropriate, to consider the most practicable means of alleviating risk; to consider which bodies or stretches of water might be amenable to an effective rescue service; what standards of response such a potential rescue service might achieve (within the team typing principles) and how it should be funded or otherwise resourced; and to publish their findings so that the general public and water users in particular can be informed as to the key factors affecting the safe use of waters in a given area.

I think it entirely appropriate and beneficial that the reports produced by such work should state clearly where the public should not expect an immediate rescue service and those where some provision is made. A useful analogue might be to think of those beaches where lifeguards are stationed at times of peak use, the boundaries of which are clearly delineated and widely published by notices and other means, in contrast to the majority of the coastline that has no such provision.

An example of existing good practice in this regard is the work led by Councillor Donald MacDonald, Argyll & Bute Council, supported by Jamie McGrigor MSP, to bring together local communities, businesses, responders and other interested parties to discuss how best to improve safety on Loch Awe.

The commendable work led by Cllr. MacDonald has produced voluntary initiatives including a Loch Awe Watch Scheme and a Loch Awe Safety Boat Scheme. If one of the 'Watchers' notes someone in trouble on the Loch they will dial 999 and report their concerns as normal. However, in addition they will arrange, normally through a co-ordinator, for someone with access to a boat on the Loch near the incident to be notified. A number of volunteers have expressed an interest in assisting with these initiatives. While I am as yet uncertain as to the detail of the training and equipment to be employed in this instance, as regards to the team typing approach I have

espoused, I consider such issues to be capable of resolution through continued discussion with the Strathclyde FRS.

Similar approaches initiated under the aegis of SCGs would serve to improve water safety through a more consistent approach to understanding risk across Scotland and, through the promulgation of good practice, as initiatives are shared through reporting back to the Scottish Government. It surprised me that on several occasions during the review I came across examples of one agency or area being quite unaware of what was being done or what facilities existed within partner agencies or in nearby districts.

### **Response to a 999 call reporting of a water-related incident**

Because I encountered a considerable degree of uncertainty as to how a report of a person or persons in difficulty in inland waters is handled from the point of a '999' call being made, I feel it would be helpful to set out here a brief summary of the process followed:

A specialist BT operator receives the 999 call and if the caller requests a particular emergency service then the call will be routed to that service regardless of whether it appears to be the most suitable.

Where the caller does not make a request for a specific service, the operator will ask them again which service it is they require. If this request again fails to elicit a specific response, or if the caller is uncertain, the call will be routed to the police as the default option for BT. BT operators are under very strict instructions not to suggest a particular emergency service but to route any 'undecideds' to the police.

When the call comes through to the police control from the '999' operator, a decision will be reached on who will co-ordinate the incident, depending on its type. If it is a 'person rescue' then, depending on the reported (often inaccurate) location, either the police or HM Coastguard will co-ordinate. If it is a body recovery then the police will co-ordinate.

Regardless of co-ordinating agency, the police control room staff will record an incident at the same time as alerting the coastguard should it lie within the latter's jurisdiction. The local FRS would also be informed should it be an inland waterway, with the apparent exception of Loch Lomond (for reasons I could not establish beyond convention).

Police will continue to monitor the incident even where it has passed to HM Coastguard.

Were a member of the public to phone a call centre or call at a police office/station to report such an incident then the response would be as above.

Should a call be received that does not relate to that police force area, an incident log would still be created, all details recorded and the appropriate force control room informed.

If an incident is routed to an FRS control room in response to a caller's request they will immediately inform the police for a co-ordination role whilst at the same time deploying resources to the incident. Where it is an incident that HM Coastguard would co-ordinate, it would still be sent from the FRS to the police in the first instance. Fire and Rescue Service would leave it to the police to inform HM Coastguard. I was advised by the very helpful control room staff in Strathclyde FRS that this is a rare occurrence as most incidents come to them from the police. The same is true for the Lothian and Borders area. None of the control staff from any agency suggested that there was any problem or delay inherent in the reporting system as practiced currently.

## **The Fire and Rescue Service**

The only public agency, other than the maritime organisations, to have developed water rescue skills appropriate to the acute rescue situation is the FRS. This capability uses the equipment and training primarily acquired to discharge their responsibility for flood rescue and encompasses swift moving water situations. The 14 teams can deploy to calls for assistance in water related incidents but as they have to travel from strategic bases at short notice the area which they can cover within a few minutes travelling time of their base is inevitably limited. The most successful deployments are those to locations relatively near at hand and with good road infrastructure. Thus Strathclyde FRS deploy on the River Clyde from a Glasgow station relatively frequently, while Lothian & Borders can deploy to the middle and upper Tweed from their base in Galashiels fairly speedily. Incidents occurring at more locations further away from fixed bases necessarily present greater obstacles to projecting a rescue capability.

CFOAS have argued that because there is a perceived public expectation that the FRS should provide an acute water rescue service then there should be a statutory duty placed upon them to do so.

The question of a statutory duty was also addressed by Sir Ken Knight in his report<sup>7</sup> on the FRS in England, albeit in relation to flooding – a duty that already exists in Scots law. Sir Ken concluded by rejecting the case for a statutory duty. It is instructive, however, to consider his reasoning as it can be applied to the context under consideration here.

One of the chief perceived benefits of a statutory duty is to impose consistency of equipment, training and operations on the diverse FRS bodies in England. The Scottish FRS has already established such a degree of consistency of equipment and training and so needs little further encouragement in this regard. Consistency of equipment and practice delivers the considerable benefit of interoperability thus permitting effective mutual aid between fire and rescue services and across borders, whether local or national. Again, the FRS in Scotland has much to be proud of, with the training and operational framework being developed elsewhere in the UK deriving much from the Scottish experience. Sir Ken argued that the challenge of greater consistency, compatibility and operational effectiveness

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<sup>7</sup> Sir Ken Knight, *Chief Fire & Rescue Adviser's review of the operational response by the fire and rescue service to the widespread flooding in England 2007. Facing the Challenge* published March 2008 (chapter 3 refers)

would not be met through legislation but through the provision of appropriate and sufficient protective and operational equipment for use by firefighters in their capacity of water rescuers. As the Scottish FRS is already well-advanced in this regard, and as I have not been made aware of any circumstances or events which have overwhelmed the current capabilities of the FRS in Scotland, I find it hard to see what utility a statutory duty on the FRS to provide a non-flood related water rescue service could have.

Some people I spoke to argued that a statutory duty would prompt greater investment in the FRS to meet that duty. I have already argued that any requirement to provide an effective acute water rescue service to all of Scotland would be impractical without a very significant – and by this I mean at least one order of magnitude – investment in personnel and equipment. This is very nearly inconceivable in almost any public spending environment and especially so in the current macroeconomic climate. It is even harder to envisage when one considers the very low percentage (less than 1%) of the total demands for service currently made on the FRS in Scotland that relate to water rescue. In any case, a number of public services, including the police and the health service, frequently find themselves having to recalculate existing priorities and finite funds in order to meet the requirements of a new law or procedure without the benefit of additional resources.

The FRS in Scotland already has the equipment and skill to provide an inevitably constrained acute water rescue service and currently responds to calls for assistance from the public or from other responders. It is not then a case of the lack of a statutory duty hindering the FRS in their wish to provide such a service. This is by no means my area of expertise but when one considers how the fire brigades of the past have developed to take on a broader range of responsibilities and make an invaluable contribution to the quality of life of communities in Scotland it is hard to envisage any retreat from the current stage of development of water rescue operations. The public do indeed expect a water rescue response from their FRS, just as they expect a rescue service in case of fire, chemical spillage, building collapse or road and train crash, not because these are statutory duties but rather because the expectation is instilled by the very title: Fire and Rescue Service. The members of the public I have spoken to are entirely reasonable in their expectations of the FRS and understanding of its limitations. They do not expect an instant response to every eventuality in every location.

To sum up, I do not believe that there is a need to place a statutory duty on the FRS in Scotland to provide an acute water rescue capability. It does not require the permission of statute to do so, as it is already providing such a service with admirable professionalism; it does not require the direction of statute to achieve consistency of training, equipment and procedure, as these have already been achieved to a creditable extent; and it does not require the power of statute to marshal, govern or direct others, as I have found no-one who has contradicted the pre-eminence of the FRS in Scotland in this field of endeavour. The Scottish Government's updating of a Fire and Rescue Framework for Scotland provides a suitable and adequate means to endorse and elaborate the responsibilities of the FRS in respect of water rescue.

In explicit response to my terms of reference, I do not recommend any change in existing legislation relating to water rescue arrangements in Scotland.

## **The Police Service**

The police, as an emergency response service with personnel and vehicles located across Scotland, are likely to be among the first to arrive at the scene of an incident, whether water-related or otherwise. Depending on location, police patrol vehicles usually only carry a crew of one or two police officers. It is a highly emotive subject but, notwithstanding the extreme courage shown by individual police officers, firefighters and others over the years, I cannot conceive of any circumstances in which organisational policy could condone an individual entering the water other than where properly equipped and supported within the team typing structure developed by the FRS in Scotland. Individuals, of course, make their own decisions *in extremis*, which can either lead to relief or further tragedy but as a working rule we should make every effort to ensure that any rescue effort, no matter how well-intentioned, is helping to solve rather than exacerbate the problem at hand.

As stated, the eight police forces of Scotland have only a very limited waterborne capability and that which exists is designed for policing patrol purposes rather than water rescue. Police personnel are not trained in water life-saving techniques, although some officers acquire them through extra-mural interests and recreations.

There is no common policy across all police forces for the carrying of throw lines on police vehicles, or for training of police personnel in their use. Neither is there any data to show whether throwlines, where they are carried, have been effective or indeed whether they have been employed. Having said this, the space taken up in a vehicle by a throwline is modest and the relative cost minimal. I therefore recommend (**Recommendation 12**) that ACPOS consider the question of developing a national policy on life-saving equipment to be carried on police vehicles and calculate the cost of training appropriate personnel in their use.

The principal role of the police in acute water rescue, as with flood rescue, is as co-ordinating and facilitating agency to oversee the search and subsequent rescue phases of any given operation that might employ public agencies and volunteer assistants ranging from the experienced Mountain Rescue Teams to the public-spirited local community. I hope that the description of the sequence of events following the making of a 999 call has been of some help in clarifying the process followed.

A very large number of respondents to consultation and during interview expressed their uncertainty about the respective roles of the police and the MCA in co-ordinating inland water rescue operations. As mentioned above, there are some areas of fresh water where the MCA and the RNLI do operate and it would be clearly helpful to a great many interested parties if the MCA and ACPOS were to publish a joint statement on their respective roles, as well as agreeing and publishing on a local basis those points of interface between them, for example on the tidal stretches of rivers, to avoid any lack of clarity among third parties.

I believe that the police should remain the principal co-ordinating agency for response to search and rescue on inland waters but that there remains work to be done between the police and the FRS in Scotland to improve effective communications in the operational environment.

The police also have responsibilities beyond the co-ordination of search and rescue. They will have to consider the possibility of any culpable behaviour and may have to prepare a report for the Procurator Fiscal. They will also have to notify next-of-kin in what will be most distressing circumstances and do all they can to keep family members advised as a SAR operation progresses – deploying specialist Family Liaison Officers where possible. In some cases there will also be news media interest which has to be met and managed.

### **Scottish Ambulance Service (SAS)**

As an emergency response service SAS personnel might find themselves to be among the first to arrive at the scene of a reported incident. While I am aware that some SAS personnel have undertaken swiftwater safety training, chiefly for the purpose of gaining access to casualties in or isolated by water, my understanding that there is no intention to provide a rescue team capability within the team typing model. The participation of the SAS within a multi-agency response is of course vital but it does not extend to unilateral entry into or onto the water for rescue purposes.

The Scottish Ambulance Service also clearly needs to be involved from the outset, in both flood and acute rescue situations, where normal routes to incidents and hospitals might be compromised.

### **The Voluntary Sector**

In contrast to the public sector, and leaving aside for a moment the primarily maritime bodies ranging from the RNLI to individual inshore rescue boats resourced and deployed on a voluntary basis or as an adjunct to some commercial shipping or other marine activity, voluntary safety boats have been established usually to cater to the needs of a particular recreational activity, such as sailing or rowing; the public-spirited enthusiasm of an individual or small group; or in response to some past event. I found no example of the establishment of such a facility, its equipment and the training of its personnel, being informed by a risk assessment. Such facilities seem to be established on the basis of perceived rather than calculated need or have evolved over time – considerable periods of time in some instances. This is not necessarily a criticism, but it would seem both sensible and more cost-effective if at least the principles for calculating the requirement and response were to be developed were to be published by the Scottish Government, perhaps as an annex to a national water safety strategy as recommended above. This is of particular importance in assisting migration towards the team typing standards I have recommended for adoption throughout Scotland.

As in the flooding context, the voluntary sector has a very great deal to contribute to Scotland's water safety. The local knowledge and experience of such providers is invaluable in helping to provide a fast, efficient and effective water rescue response

and, once identified, should be included in the inventory, risk assessment and planning process I have recommended be undertaken under the aegis of the SCGs.

## **The Private Sector**

The private sector has much to contribute to the cause of water safety beyond the provision of some direct rescue facilities in some locations, usually as an adjunct to the need to provide safety boat cover for some form of water-related commercial activity. The Passenger Boat Association, for example, has worked extremely hard and with great professionalism to improve safety relating to their own use of inland waters, particularly in light of the lessons arising from the *Marchioness* disaster. As professional users of Scotland's waters they too have much to contribute in the way of experience and expertise to any multi-agency and multi-sectoral work to be orchestrated by SCGs.

The attainment of team typing standards requires accredited training. While the FRS have now embarked on a process of establishing a training capability within the service, having utilised Royal Yacht Association (RYA) and other private sector training in the past, this is unlikely to be cost-effective for smaller organisations. Private sector provision, drawing on experience of water safety and rescue in some of the most demanding environments and industries across the globe, can offer appropriate training courses to local voluntary groups operating in different water environments thus avoiding the need to train for the breadth of eventualities for which the FRS must prepare. I recommend (**Recommendation 13**) that the Scottish Government and COSLA together explore the potential for negotiating procurement of training services on a national or regional consortia basis to minimise costs to smaller, principally voluntary, groups.

The private sector also develops technology that has the potential for application to inland water rescue. For example, Unmanned Aerial Vehicles (UAV) equipped with infra-red sensors can cover wide areas and detect even small heat sources thus having the potential for assisting in the search phase of a SAR operation. I would therefore encourage local planners at national (Scottish Government), regional (SCG) and local levels to explore the services provided by the sector that might not be directly marketed for SAR purposes but which might have some utility if suitably adapted.

## **Operational Exercises**

While I have separated out key agencies and sectors for the purpose of clear focus in this report the reality is that any major incident, flooding or acute rescue, will require a co-ordinated and mutually supporting approach from a number of organisations. Appropriate and detailed planning is of course important but the regular exercising of such plans is equally central to success. I am pleased to note that the FRS in Scotland has participated in exercises at the European level, in the Netherlands, and has sought to learn from exercises held elsewhere in the world, including the United States.

This international insight is important to all aspects of this report as, while much can be learned from experiences elsewhere in the UK, other countries with human and

physical geographies more directly comparable to those of Scotland will offer valuable opportunities for benchmarking water rescue and water safety education arrangements in particular. Regrettably, the time and resources available to this review precluded significant work of this kind but it should certainly feature in any work commissioned by Scottish Ministers in response to this report.

This is also a suitable stage at which to lay stress on the point that skilled and properly equipped personnel still require effective and informed leadership. Managers from the police, FRS and other participating authorities or agencies should also receive familiarisation training so they understand the capabilities, equipment, strengths, limitations, and safety considerations of those whom they are directing in a potentially high risk situation.

The multi-agency flood response exercise held in Tayside at the end of September this year is an excellent example of the scale of event I believe to be useful, and I know from initial reports that a great deal of beneficial learning proceeded from it. Such exercises are not just about testing techniques, equipment and communications but also do much to build effective working relationships at the individual and organisational levels within and between participants. I commend them to all SCGs and the Scottish Government as good practice to be followed on a regular basis.

## **CHAPTER 6: PUBLIC AWARENESS AND ACCIDENT PREVENTION**

Although it was not possible in the time available to conduct a formal public survey of water safety awareness and expectations of emergency responders, I did discover a broad consensus among staff in local authorities, public agencies and voluntary bodies that public perception of acute water rescue capability is unrealistic in its expectations and that, taken as a whole, the general public do not have a sophisticated understanding of the hazards and risks associated with different bodies of water. The strength of this belief might in part be attributed to the scepticism of those who by reason of their profession have to try to save individuals from the difficulties they might find themselves in, or cope with the distressing aftermath where no rescue has been possible, but a cursory examination of Scotland's waters, particularly in the summer months, would provide an abundance of examples of individuals taking ill-advised risks.

Such risks, might include inexpert boat handling, ill-matching engines or other equipment on boats, taking a vessel onto the water without formal training, using buoyancy aids – 'life-jackets' – not fit for purpose, entering the water without a buoyancy aid, swimming or wading in cold water lochs or swift flowing rivers, etc. The list could be as long as this report but they all point to either a lack of understanding of the risks or a conscious disregard for them. In the final analysis, where someone consciously enters the water or sets out on its surface in some sort of vessel they are taking a self-assumed risk. All that can reasonably be expected of national and local government, the emergency services and agencies such as the National Park Authorities, is that they make good-quality advisory information available at key locations and work together to promote an understanding of water safety in as wide a constituency as possible.

There are many problems to be addressed. I wish to avoid unhelpful generalisations but there are clearly many different audiences to be reached: local communities who live near and use bodies of water for business and recreational purposes, visitors from more distant areas of Scotland, and visitors from outside Scotland. This requires a very complex communication and education strategy to reach the widest possible audience in the most appropriate way.

During my review I was introduced to many examples of good practice. Some, sadly, pursued with exemplary humanity and vigour by those who had lost loved ones to drowning. The Safe Tay initiative is one example of charitable activity borne of just such a tragedy working closely with local councils, FRS, Tayside Police and other services to determine the most effective means of communication of preventive advice, the sifting of informative notices at high risk locations, and the installation of public rescue equipment (PRE), innovatively linked to public authority CCTV systems, at agreed key points. The charity has also shown great imagination in involving young people in the area in designing publicity and educational material about the dangers of water and the risks posed by going into or onto the water after consuming alcohol. This is an excellent example of local people working together to assess and manage risk on principal bodies of water in their area and I commend it as good practice to all local authorities in Scotland.

Schools safety days bring together key agencies, authorities and companies, such as Scottish Water, to talk about a wide range of hazards, including water; sporting bodies like the RYA, the Scottish Canoeing Association and others offer excellent advice not just to members or those engaged in their respective sports but to the wider public; and key institutions like the RNLI stage roadshow exhibitions at major public events around Scotland. These are just some examples from a broad spectrum of efforts made to bring key messages about water safety to a wider audience.

The advisory messages promulgated by Safe Tay and others elsewhere in Scotland would undoubtedly be strengthened if congruent with and supported by a national public advisory effort. The 'Safer Scotland' strap-line used by the Scottish Government would be an ideal umbrella under which to formulate a communications strategy for water safety education and I recommend (**Recommendation 14**) that Scottish Ministers request officials in Scottish Resilience to explore this opportunity and report back to them with proposals for action.

I was most grateful to a number of voluntary groups for providing me with detailed and thoughtful responses to consultation. It is essential that they be given the means to contribute to the development of water safety advice and I therefore further recommend (**Recommendation 15**) that Scottish Resilience consider the benefits of establishing a broadly based Water Safety Working Group to inform and lend impetus to this vital work.

### **Public Rescue Equipment (PRE)**

After careful consideration, I find myself unable to agree with the Safe Tay charity and some others, that there should be a statutory requirement for local authorities to install PRE. The diversity of Scotland's waters, together with remoteness and expanse of many of them make this an impractical proposition. The operation of such equipment by those untrained in its use limits its effectiveness and advice from RoSPA suggests that it is used with success in only a very small number of instances of water rescue throughout the UK in each year. Of course, even a small number of successful rescues is in itself a welcome result but the cost and restricted range – even an athlete can only throw such equipment a matter of feet from the shore - of such equipment, when set against other measures such as preventive education, tends to indicate that it is only suitable for effective installation in a limited number of situations best determined at local authority level. I also have some anxiety that the presence of PRE can provide false reassurance to individuals who might inadvisably enter the water in the belief that help is at hand should they get into difficulties.

### **Bye-laws and Codes of Practice**

Several respondents raised the subject of the efficacy of bye-laws for improving water safety, most frequently referring to those in place on Loch Lomond.

I consider that the principal benefit of bye-laws, as with any properly drafted code of practice, is to set out the acceptable standards of equipment and behaviour expected of those using a specified body of water. As with most law that seeks to

regulate public behaviour, bye-laws are observed and obeyed by the vast majority while providing the opportunity for enforcement against the minority who ignore or breach them. Enforcement, of course, requires the means to do so, which in itself can be expensive and I have not been presented with evidence that persuades me that bye-laws achieve discernibly better standards of behaviour and reduction of risk when compared with those bodies of water where a voluntary code of practice, negotiated and agreed by principal user groups, is in place. Indeed the code of practice has the advantage of being more readily subject to updating and development to reflect changing usage or other conditions. In any case, each body of water must be treated on its own merits but I would suggest that bye-laws should perhaps be the last resort for influencing behaviour rather than the initial means of attempting to do so.

It is tempting to think that a few simple legislative measures, such as the mandatory universal wearing of buoyancy aids when entering or going out on the water, would bring benefits but this is simplistic and would in any case be extremely difficult to enforce. They would also bring unintended consequences: competitive rowing, for example, would be made impossible. I remain of the view that a combination of advice and sound codes of practice adaptable to different water-users would represent the most practical way forward.

I certainly endorse the development of codes of practice for specific bodies of water or stretches of river or other waterway. The process of negotiating such a code itself brings together a range of stakeholders, promoting mutual understanding and developing a more finely textured understanding of the risks posed by a body of water or arising from its use.

### **Public notices**

I have mentioned above the means by which the best sites for advisory signage can be explored and agreed between councils, agencies and other interested parties but I think it is worth rehearsing here a few examples of where I believe more could be done to maximize the availability and impact of safety signs or other messages:

- I visited several waterside car-parks where there were signs relating to the prohibition of overnight parking, the lighting of fires, the leaving of litter and illegal tipping but nothing offering advice on water safety;
- Several commonly used boat launching points had signs relating to car-parking, unauthorized fishing and restrictions on mooring but nothing on water safety;
- Local shops and websites of global popularity selling fishing permits, together with gates leading to fishing beats and fishing huts, often displayed prominent notices relating to the prevention of fish disease but notices relating to water safety, where present at all, were much less prominent.

Signage in public places was frequently raised by respondents to consultation and, while it is no panacea, it is apparent that there is a marked lack of consistency of practice, and a great deal of uncertainty as to who has responsibility – if a responsibility can be shown to exist – for the design and installation of signage in a limited number of strategic or high risk sites. This is a subject, among others, that

could usefully be explored by a National Water Safety Working Group as recommended above.

## CHAPTER 7: CONCLUSIONS

I shall conclude by returning to my terms of reference and addressing explicitly the issues they required me to consider:

### ***The resources and capabilities of all agencies currently involved in water rescue emergencies, including flooding***

I have not found it possible within the time available to establish an inventory of the full breadth and extent of Scotland's resources and capabilities when taken across the public, private and voluntary sectors but I have elaborated the key issues that need to be addressed and the means by which such an inventory can be achieved.

### ***Whether there is a need for change in current operational arrangements between responders.***

I have outlined current arrangements and, in some areas, highlighted where they could benefit from greater clarity and wider understanding. There are adjustments to be made but do not recommend any fundamental change in operational arrangements between responders.

### ***Whether there is a need for a change in the law covering the responders who cover water rescue.***

I have considered this question at some length, examining the current legal framework and considering the experience in other jurisdictions. While my thoughts are set out more comprehensively in the body of this report my conclusion is that there is no requirement for a change in the law covering responders and that such progress as does need to be made can be achieved through appropriate memoranda of understanding and/or manuals of operational doctrine.

### ***The level of public awareness and education of the risks associated with open water.***

The public as a whole does not have a single level of awareness of the risks posed by Scotland's waters. There are those, many of them members of well-regulated sports associations, who have a sophisticated understanding of the aquatic environment while others, at the opposite end of the spectrum would not think of themselves as water users at all but are brought into immediate contact with its power through weather events, misadventure or accident. The consensus among those who were generous enough to share their views and expertise with me was that current efforts to educate and inform are praiseworthy but often too localised, specialised or otherwise fragmentary, and need to be brought under an over-arching national water safety communication strategy.

I have tried to address all the points made by stakeholders and correspondents during the course of this brief review without descending into too much technical and procedural detail. Inevitably there will be those who find themselves at variants with my conclusions and recommendations, or others who for whatever reason were unaware of the review and would wish to contribute their opinions and suggestions

for improving water safety and rescue arrangements in Scotland. The Minister for Community Safety, to whom I respectfully submit this report, has emphasised his commitment to wide consultation following this report and will doubtless indicate the means by which this will be undertaken in the near future.

## **CHAPTER 8: SUMMARY OF RECOMMENDATIONS**

### **Recommendation 1**

That water rescue and relevant geographical terms be included within the draft Civil Protection Lexicon and this resource be more effectively promulgated throughout Scotland and the wider UK. The Lexicon should be developed with a view to interoperability with agencies from outside Scotland and so any terms that might be subject to being misconstrued should be avoided.

### **Recommendation 2**

That Scottish Ministers require officials of the Scottish Government to form an appropriately representative working group to establish a mechanism for recording complete details of drownings, water-related casualties and rescue incidents in Scotland on a business year basis, and to determine how this should engage with the system developed by the NWSF. In doing so, I would urge the Scottish Government to consider, in addition to placing a requirement on public authorities, a means by which voluntary, sporting and other relevant organisations can report incidents on a voluntary basis even where no demand has been placed on responder agencies. This will be made easier if there were an official within Scottish Resilience designated as having lead or portfolio responsibility for water safety matters in Scotland.

### **Recommendation 3**

That a representative of the HSE be included as a member of any national group tasked by Scottish Ministers with responding to this review.

### **Recommendation 4**

That a focus for these discussions should be the clarification, development and more effective promulgation of the 'Responding to Emergencies' section of *Preparing Scotland* so that it meets a widely expressed need for a manual of doctrine and operations for SCG that sets out the constitutional relationship between the constituent organisations, as well as the responsibilities of each organisation during the planning, precautionary and operational phases of an emergency such as severe flooding. This should assist understanding, enhance operational effectiveness and inform public understanding and expectation as to the question I was asked on several occasions: 'who is in charge?'

### **Recommendation 5**

That each FRS in Scotland, working under the aegis of their respective SCGs, should be requested by Scottish Ministers, through the relevant Fire and Rescue Boards, to compile a public register of declared water rescue assets in the public, private and voluntary sectors (including individual private persons), to include a clear definition of the capability in each instance.

## **Recommendation 6**

That Scottish Ministers should formally acknowledge that, where a Chief Fire Officer is not satisfied as to the safety or efficacy of a capability offered then he or she should be able to refuse to work with that person or asset on operations; and that should a person or persons attempt to participate in a rescue operation in defiance of the direction of the Chief Fire Officer, or his or her junior officer in command of the operation, then the matter should forthwith be reported to the police with a view to the exercise of appropriate police powers under common or statute law to prevent any undue hindrance of rescue operations.

## **Recommendation 7**

That the register of water rescue capability in each SCG area adheres to a common national format to be developed by CFOAS, in partnership and agreement with the Head of the Scottish Fire and Rescue Advisory Unit (SFRAU) and that an annual return be made to the Head of SFRAU so that the national capability can be assessed and published by Scottish Ministers.

## **Recommendation 8**

The Team Type approach form part of the basis on which declared rescue assets are admitted to the register to be compiled in each SCG area, as described above, and that the relevant criteria, equipment and training to maintain the Team Type model at the forefront of development of professional understanding of water rescue techniques and equipment be revised on Scotland-wide basis at least once each financial year and agreed by CFOAS and the Head of the Scottish Fire and Rescue Advisory Unit.

## **Recommendation 9**

Scottish Ministers direct an audit of the utilisation and suitability of the FRS water rescue equipment procured to date; request each SCG to reappraise local risk and requirement; and, in the light of the SCG reports, to establish the need for a minimum national water rescue capability requirement, the long term funding arrangements for which should be negotiated and settled between national and local government.

## **Recommendation 10**

Scottish Ministers consider asking officials to provide an updated and detailed options paper, with associated costs, to explore whether offsetting some risk to the private sector at the high end of capital cost or call-off contracts for the provision of specialised equipment might provide value for money for the public purse rather than owning under-utilised equipment in the public sector.

## **Recommendation 11**

Scottish Ministers ask each SCG to extend their work on community risk register to encompass the bodies of water in their respective areas and to set up working

groups at, such level as they think appropriate, to consider the most practicable means of alleviating risk; to consider which bodies or stretches of water might be amenable to an effective rescue service; what standards of response such a potential rescue service might achieve (within the team typing principles) and how it should be funded or otherwise resourced; and to publish their findings so that the general public and water users in particular can be informed as to the key factors affecting the safe use of waters in a given area.

### **Recommendation 12**

ACPOS consider the question of developing a national policy on life-saving equipment to be carried on police vehicles and calculate the cost of training appropriate personnel in their use.

### **Recommendation 13**

The Scottish Government and COSLA together explore the potential for negotiating procurement of training services on a national or regional consortia basis to minimise costs to smaller, principally voluntary, groups.

### **Recommendation 14**

The advisory messages promulgated by Safe Tay and others elsewhere in Scotland would undoubtedly be strengthened if congruent with and supported by a national public advisory effort. The 'Safer Scotland' strap-line used by the Scottish Government would be an ideal umbrella under which to formulate a communications strategy for water safety education and I recommend that Scottish Ministers request officials in Scottish Resilience to explore this opportunity and report back to them with proposals for action.

### **Recommendation 15**

Scottish Resilience consider the benefits of establishing a broadly based Water Safety Working Group, which includes the voluntary sector, to inform and lend impetus to this vital work.

29 June 2009

Dear Colleague

**REVIEW OF SCOTLAND'S WATER RESCUE CAPABILITY - STAKEHOLDER CONSULTATION**

You may know that the Minister for Community Safety, Mr Fergus Ewing, announced on 12 May 2009 that he had asked me to conduct an independent review of Scotland's water rescue capability and to report with recommendations by the end of October 2009. I attach at **Annex A** the related news release which issued on 12 May.

The remit I have been given is as follows:

To report to Scottish Ministers with recommendations on whether Scotland's water rescue response may be improved, having particular regard to:

The resources and capabilities of all agencies currently involved in water rescue emergencies, including flooding.

Whether there is a need for changes in current operational arrangements between responders.

Whether there is a need for a change in the law covering the responders who cover water rescue.

The level of public awareness and education of the risks associated with open water.

Please note that my review relates to inland waters only and does not include the coastal or maritime environment.

It is clearly important to ascertain the views of a wide range of stakeholders in addition to certain specific statutory and voluntary agencies with whom I will be consulting in person. This letter is therefore being sent to local authorities, fire and rescue services, police forces, procurators fiscal and a wider range of emergency or specialist rescue services (a full list is shown as **Appendix B**) - as well as others with a commercial, recreational or other interest in the safe use of Scotland's inland waters.

This letter asks a few questions to seek a broad understanding of how the matters under review affect your own organisation and how you regard them in the context of the wider range of responsibilities you have to address. A more detailed series of questions will be sent to key agencies in due course. I am also inviting responses from those who represent, examine or act as advocates for users. With this in mind, I would like to receive your observations or comments on the broad issues identified, and any other matters you think I should consider, by 31 July 2009.

Clearly, there will be some matters on which your knowledge is not complete, but I would ask that you offer a view on what you feel competent to comment upon, based on your experience and knowledge of working to mitigate risk through preventative advice and preparation for emergency response. The questions below are by no means exhaustive and you should not feel constrained by them if there are additional points you would wish to bring to my attention.

For those recipients who head large organisations with regular and varied interaction with agencies or bodies having interests in Scotland's inland waters, e.g. local authorities, you may wish to consult internally with relevant directors and then provide a combined response.

### **Key issues affecting your current operating context**

Before looking ahead I would like to know what you feel are the most important issues currently affecting your responsibility for or interest in safety on inland waters. I am particularly interested in what affects the way you work with partners in the public, private or voluntary sectors.

#### **Question 1:**

What do you perceive are the key issues affecting your service to the public using inland waters or in the mitigation of risk from flooding of landward areas at present? (This can be limited to a handful of bullet points unless technical explanation is needed).

### **Your strategic outlook**

The safety of the public in relation to inland waters is not, of course, the responsibility of a single agency. I would be interested to learn of your assessment of the risk relating to inland waters in your area of responsibility, your estimation of how these may change over time, and how you work or intend to work with others to address these risks.

#### **Question 2:**

**2a.** What aspects, if any, of your planned development and competing priorities are likely or ought to have an influence on inland water rescue provision in Scotland over the next 5 years?

**2b.** What changes, if any, do you anticipate in the environment in which you operate which are likely or ought to have an influence on the use of – and associated risks arising from – inland waters and/or flooding in Scotland over the next 5 years?

### **Important service delivery issues in relation to inland waters or flooded areas**

There are several broad themes that most people might agree appear to be important in terms of delivering the best possible service to the public in relation to safety near or on inland waters, or in flooded areas, but we are keen to learn what

you think about this. Naturally, people already in an emergency situation expect a prompt, well-trained, properly equipped and co-ordinated response. But most would also agree that members of the public should be supported in developing an awareness of the risks associated with inland waters or floods and thus be better able to reduce their level of risk.

**Question 3:**

**3a.** What do you see as the important issues affecting public awareness relating to inland waters or flooded areas and how might preventative advice or other action be made more effective?

**3b.** From your experience, are the public fully aware of any limitations which may exist in relation to the effectiveness of public rescue equipment made available for their use?

If you have produced any publicity, training or other material to promote water safety, we should be most grateful to receive copies or hyperlinks as appropriate. Equally, if you participate in any events intended to promote water safety we would appreciate further details.

**How and by whom should rescue services be provided?**

Currently, rescue responses to emergencies on inland waters or in flooded areas are provided by a number of local and national (Scotland and UK) authorities, agencies and voluntary bodies. No single agency is pre-eminent or has powers of direction over other agencies or bodies involved in the provision of rescue services on inland waters, although conventions as to co-ordination of multi-agency efforts are well developed. Equipment for rescue from water can range from the relatively cheap and simple, such as throw lines or buoyancy aids, to those requiring very significant capital investment and operating expertise, such as helicopter winching and infra-red sensor equipment.

**Question 4:**

**4a.** How would you wish to see rescue services develop to provide the range of capabilities mentioned above?

**4b.** Should a single agency or authority have responsibility for determining rescue capability and capacity at local, regional or national level within Scotland?

**4c.** Should a single agency or authority have powers of direction over others to promote co-ordination of effort and resources?

If you have answered 'yes' to (b) or (c) above would you feel able to indicate which agency or authority would be most suited to the role or do you feel a new agency should be created?

I want to try to gauge what can best be delivered locally (and what 'local' means in this context) and what needs to be provided at a wider level. I want to ensure that, as

far as is possible, there is sufficient resilience to ensure that all Scotland's communities affected by flooding or any individual in danger on inland waterways will have equal access to expert and specialist rescue services when required.

**Question 5:**

**5a.** Are there any broad principles which might help to determine what aspects of open water rescue need to be concentrated at each of three broad levels: local, regional and national?

**5b.** What should determine the aspects of open water rescue that need to be locally managed and delivered; what should determine what needs to be managed at a group or regional level; and what should determine what needs to be managed (if not necessarily delivered) at national level?

**Standards**

At present I am not aware of any minimum standards for the training, equipping or deployment of open water rescue efforts, other than those developed at UK level by the Fire & Rescue service. I appreciate, however, that the nature of local water environments or flooding risks, the variety of Scotland's topography, and the need to experiment occasionally with new approaches mean that there will always be (and perhaps should always be) variances in the way that rescue services are delivered.

**Question 6:**

**6a.** Is it possible for agencies, local authorities and voluntary bodies to maintain their independence while adopting common minimum standards in equipment, training and deployment of rescue capability?

**6b.** If so, how might this be achieved?

**Governance**

There is presently no nationally agreed strategy for risk mitigation and the provision of open water rescue services in Scotland.

**Question 7:**

**7a.** Do you feel there is any need for the mechanisms of governance covering all responders in open water rescue to be made clearer, reviewed or changed?

**7b.** If so, how might this be achieved?

**Question 8:**

Is there any other issue or information which you feel should influence this review?

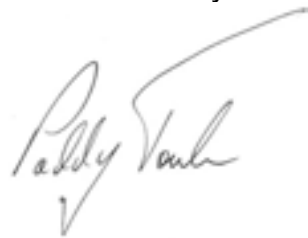
## Conclusion

I would be grateful for as many responses to these questions as you feel able to offer. All responses should be sent to [waterrescuecapabilityreview@scotland.gsi.gov.uk](mailto:waterrescuecapabilityreview@scotland.gsi.gov.uk) by 31 July 2009. Please do not hesitate to add anything further that you think I should consider in relation to this review.

I aim to produce a summary report, to be considered alongside the results of other consultation work and a scoping study of inland water rescue arrangements in some similar countries and the rest of the British Isles. These pieces of work will inform the final review report with recommendations to the Minister for Community Safety by the end of October 2009.

Thank you in advance for your invaluable support in this consultation exercise. As I develop options for consideration I will undoubtedly need to return to some, or all, of the stakeholders for further reaction and it would therefore be helpful if you would be kind enough to supply the contact details of a person within your organisation to act as a single point of contact to whom I can address any further questions.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Paddy Tomkins', with a long, sweeping horizontal stroke extending to the right.

**PADDY TOMKINS**

News Release - May 12, 2009

## **REVIEW OF SCOTLAND'S WATER RESCUE CAPABILITIES**

A comprehensive review of the emergency services' ability to deal with all forms of water rescue was announced today.

The review, led by Paddy Tomkins QPM, former HM Chief Inspector of Constabulary for Scotland, will work with a range of stakeholders to report to Ministers with recommendations on whether Scotland's water rescue response may be improved.

The review will examine:

- The resources and capabilities of all agencies currently involved in water rescue emergencies, including flooding
- Whether there is a need for changes in current operational arrangements between responders
- Whether there is a need for a change in the law covering the responders who cover water rescue
- The level of public awareness and education of the risks associated with open water
- Currently a wide range of agencies, including police, fire & rescue services, mountain rescue teams, HM Coastguard and the RNLI could be called upon to undertake a water rescue, with the response in many cases involving several agencies.

Views will be actively sought from all these agencies for full consideration by Ministers. Any proposals for legislative, or operational/practice change would be taken only after a full public consultation.

Minister for Community Safety Fergus Ewing said:

*"Water rescue is a dangerous area of response for our emergency services, and Scotland's unique geography provides additional challenges.*

*"It is an area of rescue where co-ordination remains critical, so it is only proper that we undertake this review to ensure we have the right capability, supported by the right legal framework. The people of Scotland deserve and expect no less."*

David Wynne, Chair of the Chief Fire Officers Association Scotland added:

*"I welcome the Minister for Community Safety's announcement of a full review of Scotland's water rescue arrangements."*

*"While current arrangements are robust, I believe there remains scope for greater clarity on roles and responsibilities. I look forward to working with Paddy Tomkins to provide the Minister with a detailed picture for his consideration"*

**LIST OF CONSULTEES**

Advisory Group Members – Water Rescue Capability Review  
Air Officer Scotland, RAF Leuchars  
Area Procurators Fiscal  
Association of Principal Fire Officers  
British Waterways  
Chair of Scottish Police Conveners Forum  
Chair, Mountain Rescue Committee of Scotland  
Chief Constables in Scotland  
Chief Executive of the Maritime and Coastguard Agency  
Chief Executive of the Royal National Lifeboat Institution  
Chief Executive of the Scottish Ambulance Service  
Chief Executives of 14 regional NHS organisations  
Chief Executives of 32 local authorities  
Chief Fire Officers Association Scotland  
Chief Fire Officers of the eight Fire and Rescue Services  
Chief Police Officers Scotland  
Coyne, Ronald & Sue  
Fire Brigade Union  
Fire Officers Association  
Fishing Associations  
Flag Officer Scotland and Northern Ireland, Royal Navy  
Glenmore Lodge  
Health and Safety Executive  
Historic Scotland  
Horrocks, Dave AS Training  
Jim Martin, Public Services Ombudsman for Scotland  
Major General Andrew Mackay, 2 Division, Army  
Members of the Ministerial Advisory Group on Fire and Rescue Matters  
Members of Scottish Parliament  
National Farmers Union  
National Parks Authorities  
National Trust for Scotland  
National Water Safety Forum  
Norman McFadyen, Crown Agent  
Passenger Boat Association  
President of Confederation of Scottish Local Authorities  
Royal Life Saving Association  
Scottish Accident Prevention Council  
Scottish Environmental Protection Association  
Scottish Fire Conveners Forum  
Scottish Fire and Rescue Advisory Unit  
Scottish Hydro Electric  
Scottish Police Superintendents  
Scottish Society of Prevention to Cruelty to Animals  
Scottish Water

Secretary of Scottish Police Federation  
Sporting Associations (sailing, rowing, canoeing, diving and angling)  
The Royal Society for the Prevention of Accidents

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