National Project
Prevention of Flood Related Fatalities: A focus on driving through floodwater

www.ses.nsw.gov.au
Background

- Law Crime Community Safety Council
- Australian New Zealand Emergency Management Committee, Community Engagement Sub Committee
- Funded by Commonwealth Attorney General’s Department
- National Working Group
- Workshop
- Scoping Report

Caboolture May 2015 courtesy Floodlist
What?

FLOOD FATALITIES TOTAL close to 2000 (since 1900)

182 since 2000

4 since Christmas 2015

81 motorists (45%)

35% in 4WD (increased over the last 15 years)

Haynes et al 2016
Who?

70-80% male

AGE 10-29 and over 60

Experienced, inexperienced drivers and risk takers

Workers

Tourists

Locals

Death distance from home

Percentage of fatalities

Haynes et al 2016
Royal Life Saving Australia, 2016
QFES 2015

www.ses.nsw.gov.au
Where?

Percentage of fatalities

- **NSW**: 40.8%
- **QLD**: 29.5%
- **VIC**: 10.1%
- **SA**: 8.3%
- **TAS**: 4.5%
- **WA**: 2.7%
- **ACT**: 2.4%
- **NT**: 1.8%

Percentage of flood fatalities

- **Herbert River**: 2.9%
- **Fitzroy River**: 7%
- **Brisbane River**: 8.6%
- **Richmond River**: 3.4%
- **Clarence River**: 2.1%
- **Hunter River**: 7.5%
- **Hawkesbury River**: 5.6%
- **Shoalhaven River**: 2.3%
- **Yarra River**: 2.9%
- **Tasmania**: 2.7%
- **Murrumbidgee River**: 8.4%
- **Namoi River**: 3.1%
- **Macquarie River**: 3.7%
- **South Coast**: 2.8%
- **South-west**: 0.6%
- **Indian Ocean**: 0.2%
- **Lake Eyre**: 2%
- **Gulf of Carpentaria**: 0.2%

**Haynes et al 2016**

www.ses.nsw.gov.au
When?

Mostly in **Summer**, especially February
Afternoon/night
Fridays
Why?

“I’m a local, I know the roads and how they flood”

“My vehicle can handle the water – It’s a 4WD, heavy, diesel, has high clearance, has a snorkel”

“It’s the small cars and soccer mums that don’t know what they’re doing – they get in the way”

“Only fast flowing water is dangerous”

“If I can walk through it, I can drive through it”

“I’ll follow in the wake of a truck and be OK”

“The car manual says it can handle this depth”

Haynes et al 2016
Footprints Market Research 2015
Sunshine Coast 2015
Why not?

• Dangerous (even 10-30cm)

• Things may be hidden beneath the surface

• Road and car damage

• Legal charges (up to $425)

• Manslaughter or actual bodily harm/ grievous bodily harm

• Sends mixed messages – encourages others

• Electrocutation or contaminants e.g. E.Coli, enterovirus, hepatitis, norovirus, adenovirus, coliforms

Shand et al 2011
Engagement
Enforcement
Encouragement
Engineering
Emergency Management
AVOID LOSING CONTROL OF THE SITUATION

Check your journey for potential flood risks and get your Plan B together to stay safe.

Flooded Roads Map

IF YOU KNEW WHAT WAS IN IT, YOU WOULDN'T GO IN IT.

Flooded? Here’s why you forget it.

NEVER ENTER FLOODWATER
• Multidisciplinary, including media, government, schools, car advertising etc

• Multiple mediums

• Consistent concise, personalised and clear with positive actions and memory aids

• Emphasise the ease and benefit including conformity with social norms and personal goals
Engineering
<table>
<thead>
<tr>
<th>ACT</th>
<th>NT</th>
<th>Tas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSW</td>
<td>Qld</td>
<td>Vic</td>
</tr>
<tr>
<td>Crimes Act 1900</td>
<td>Criminal Code 1899</td>
<td>Crimes Act 1958</td>
</tr>
<tr>
<td>Regulation 2000</td>
<td>Transport Operations (Road Use)</td>
<td></td>
</tr>
<tr>
<td>Rural Fires Act 1997 (NSW)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Emergency &amp; Rescue Management Act 1989</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Emergency Service Act 1989</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Health &amp;d Safety Act 2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SA</td>
<td>WA</td>
</tr>
<tr>
<td></td>
<td>Criminal Law Consolidation Act 1935</td>
<td>Criminal Code 1913</td>
</tr>
<tr>
<td></td>
<td>Fire &amp; Emergency Services Act 2005</td>
<td>Road Traffic (Administration) Act 2008</td>
</tr>
<tr>
<td></td>
<td>Road Traffic Act 1961</td>
<td>Road Traffic Act 1974</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other general local laws</td>
</tr>
</tbody>
</table>

Other general local laws
Emergency Management

- *Prevention*… Land use and community engagement
- *Preparedness*… Plans and community engagement
- *Response*… Rescue capability and warning systems
Some key points

• Collaboration

• Measurement (beyond )

• Research and piloting

Dr Elspeth Rae
elspeth.rae@ses.nsw.gov.au

0477 367 227
4251 6692

On behalf of the working group