BNHCRC Flood Risk Communication

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@PsyMQ

MACQUARIE University

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Australian Government
Department of Industry, Innovation and Science

Business Cooperative Research Centres Programme

End users

- NSW SES (Lead)
  - Josh McLaren, Coordinator Community Capability – Southern, Western and South Eastern Zone
- AFAC SES Community Safety Group
- Partnership and communication has continued with the NSW SES, VIC SES, SA SES, DFES, NTES, QFES, TAS SES and ACT SES through their participation in research activities and development.

Project Overview: Driving & Floodwater

Understanding behaviour in and around floodwater

- Questionnaire Research: Public and SES
- Mental Models Research
- Experimental Decision-making research (cue utilisation)

Evaluating flood risk communication

- Collating and analysing existing communication materials
- Evaluating these materials with stakeholders to produce guidelines

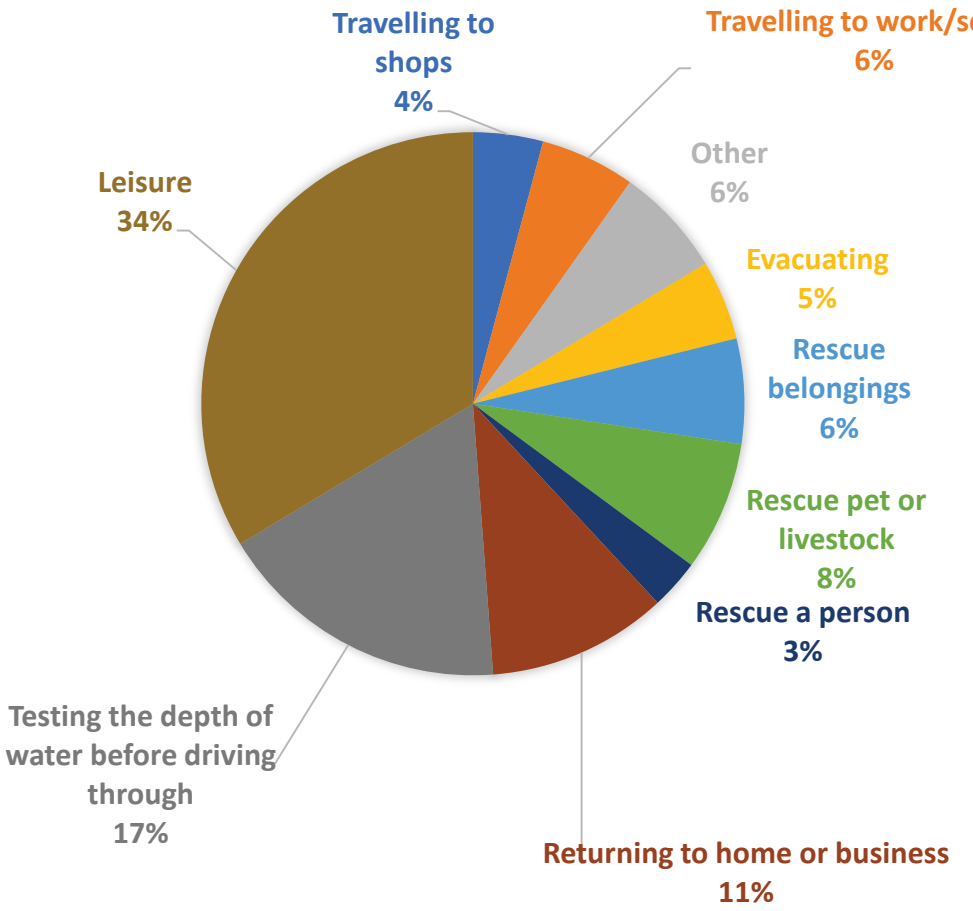
Public Survey: Encountering Floodwater

- Aims:
  - To understand how the public view risk, as it relates to water on the road and recreating in floodwater;
  - To understand the circumstances in which the public enter ‘floodwater’ on the road;
  - To understand the circumstances in which the public enter ‘floodwater’ for recreation

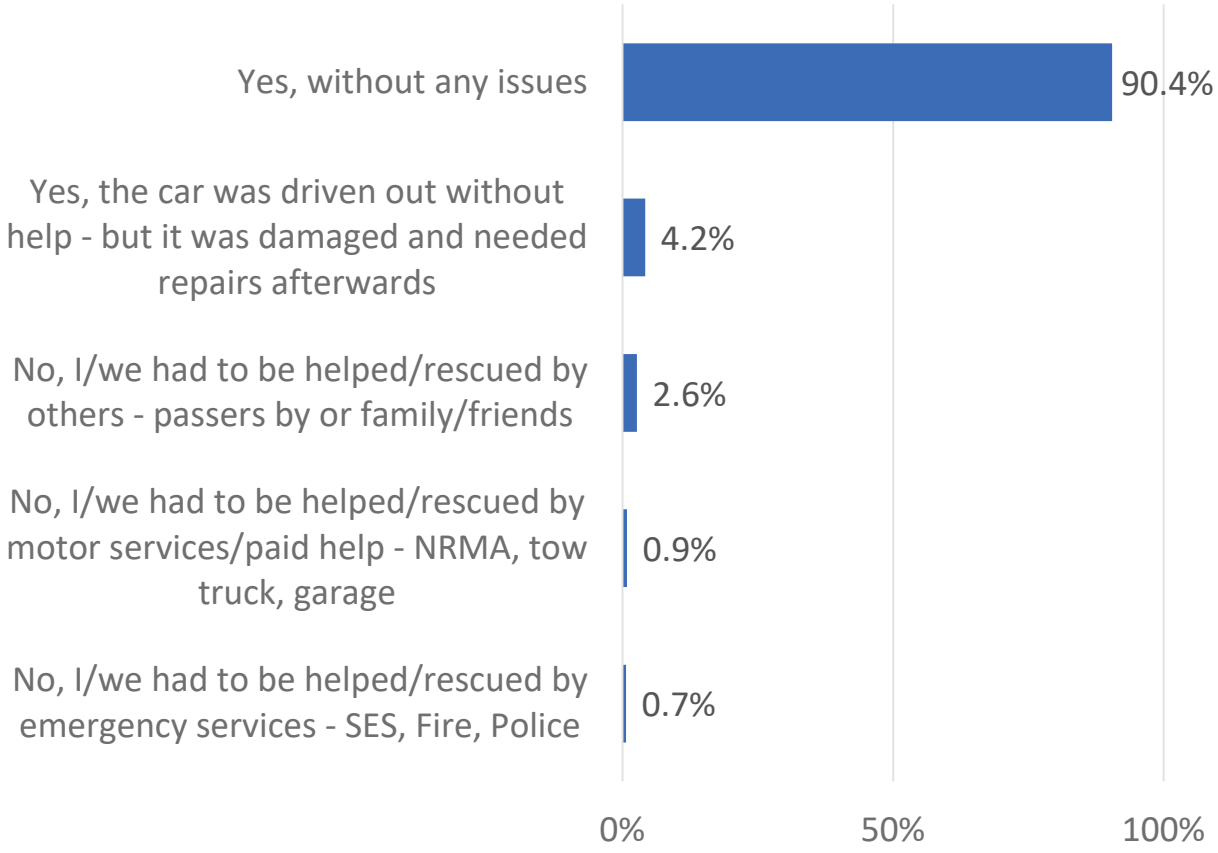
- Sample:
  - n=2200
  - Nationally representative by age, gender and state

Public Survey: Encountering Floodwater

Reasons for wading in floodwater on land



Did you succeed in driving through floodwater on this occasion? (n=1172)



Topic areas of findings

- Public experiences of entering floodwater on roads
- Public behaviour around, and experiences of, entering floodwater (on foot and recreating)
- Public recall of flood risk messages

Next steps

- Detailed statistical analysis to:
  - Identify at-risk cohorts for entering floodwater (driving/recreating)
  - Understand why people enter floodwater, the circumstances under which people enter floodwater, and the consequences of it
  - Evaluate knowledge of flood risk messages and reported behaviour

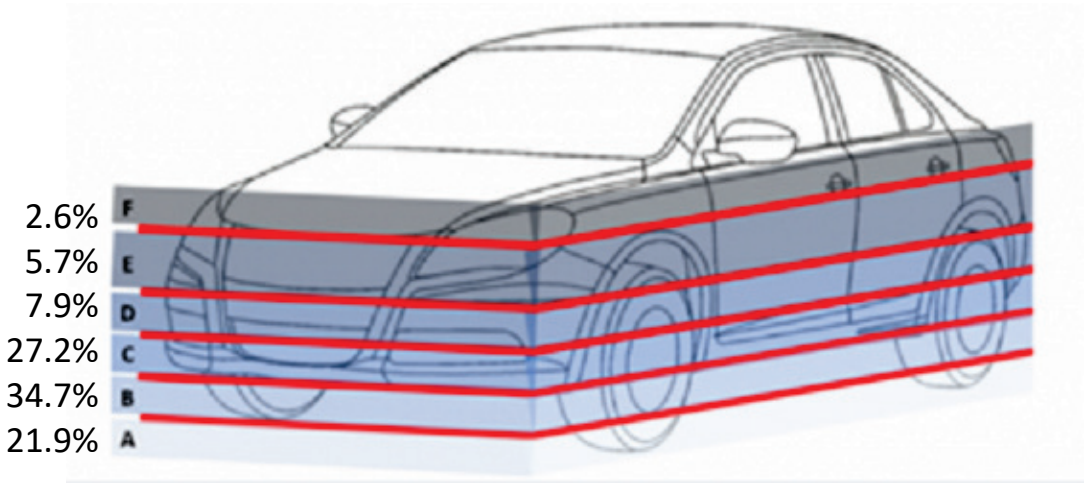
Potential applications and uses

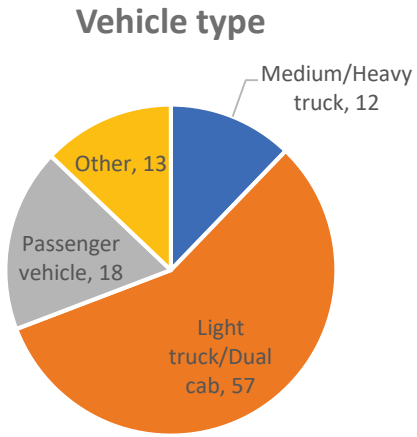
- Inform flood risk messaging development and dissemination
- Inform community engagement and community education
- Potential use of ‘water on road’ images for community engagement tool

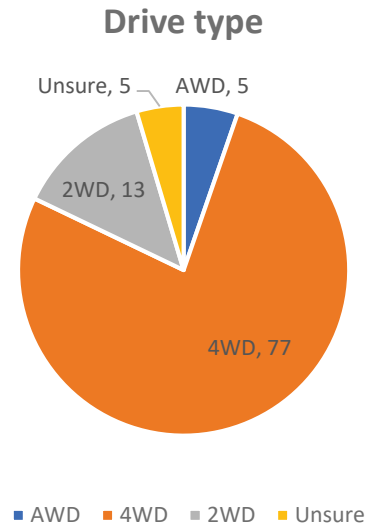
SES Encountering Floodwater Survey

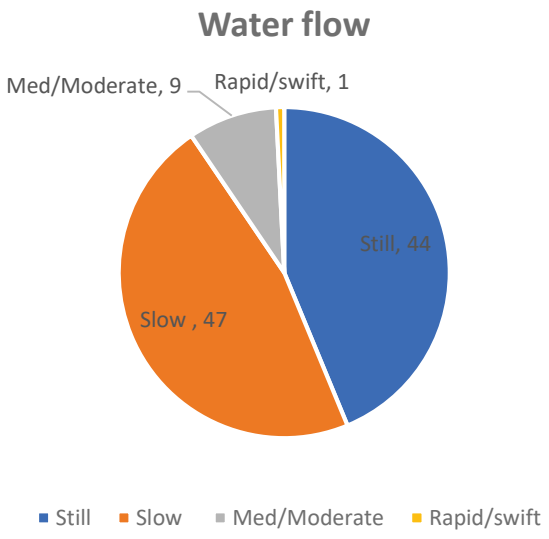
- Aims
  - To understand the characteristics of those who drive/don't drive through floodwater in SES vehicles.
  - To understand the circumstances in which SES personnel enter floodwater on the road when in SES vehicles.
  - To determine factors that relate to higher risk driving into floodwater on roads.
- Currently:
  - Survey has been completed by four jurisdictions
  - Advanced statistical analysis currently being completed

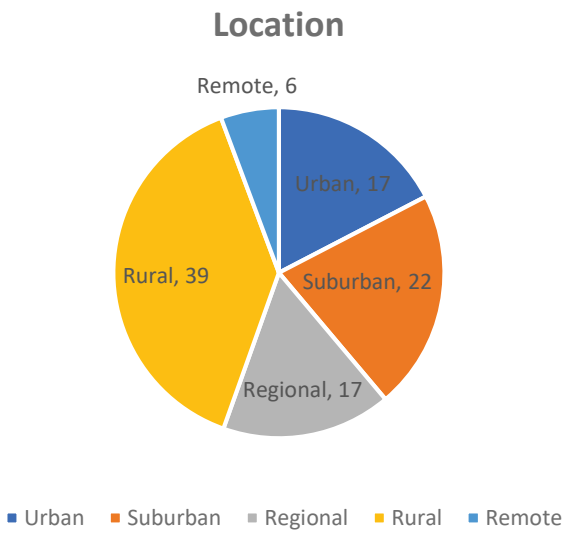
SES experiences of driving through floodwater

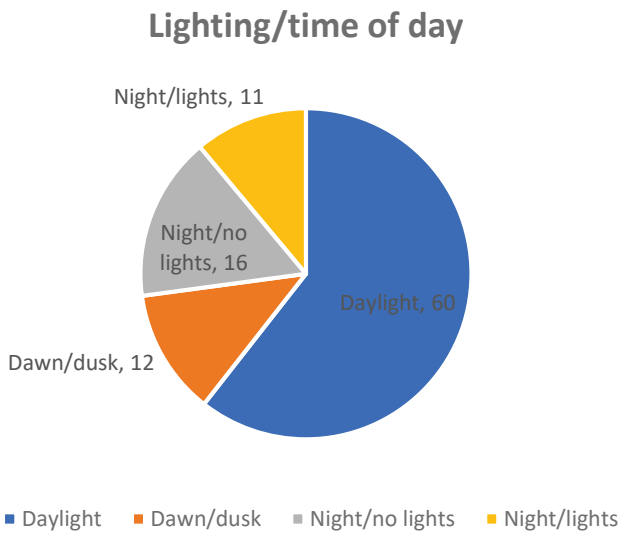


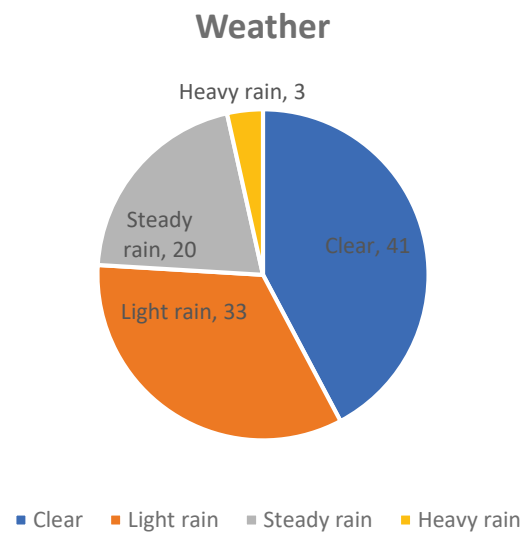












Topic areas of findings

- SES members' behaviour around, and experiences of, water on roads in SES vehicles
- Organisational safety climate

Next steps

- Detailed statistical analysis to:
  - Identify at-risk cohorts for entering floodwater in SES vehicles
  - Better understand the situations in which SES member enter floodwater, and the factors influencing their decisions
  - Explore relationships between training and entering floodwater

Potential applications and uses

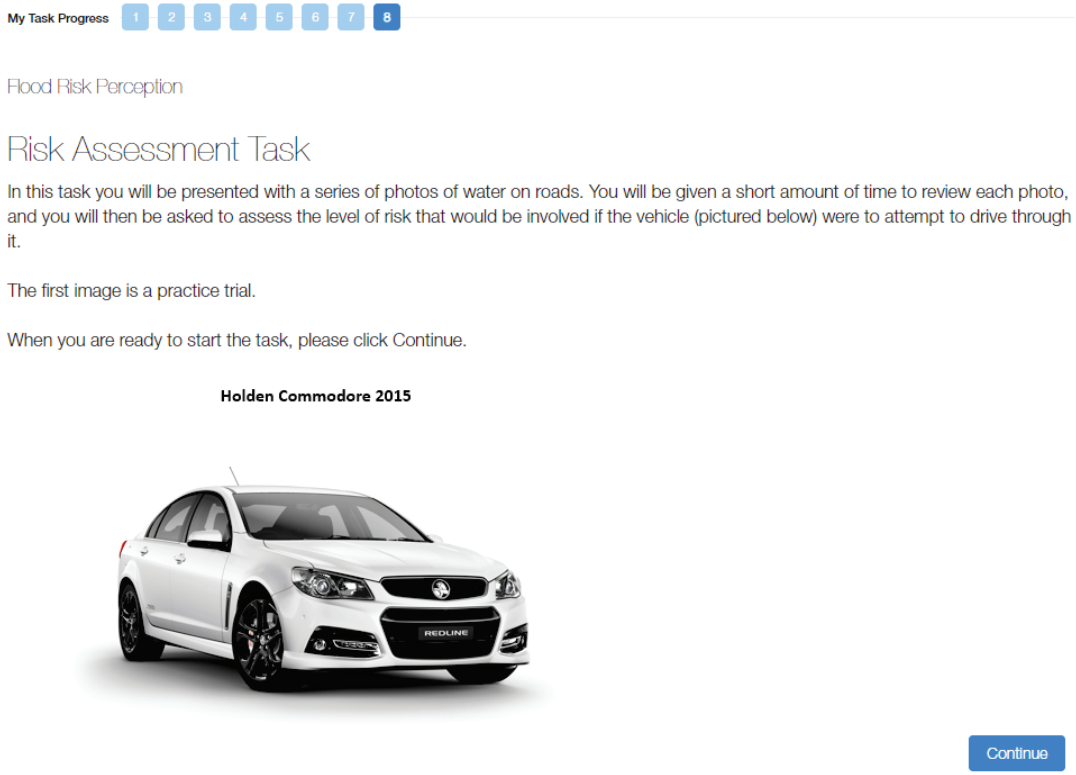
- Inform the development of policies, training and protocols within SES organisations
- Inform training activities and discussion of floodwater and risk
- Inform internal communications and data use for benchmarking

EXPERTise: Flood Risk Perception

EXPERTise 2.0
Expert Intensive Skills Evaluation Program

- Assessing expertise in skilled situation assessment
- Identification of higher and lower cue utilisers

- Participant groups:
  - SES members
  - Inexperienced drivers



Topic areas of findings

- Relationship between cue utilisation and risk assessment
- Characteristics of higher and lower cue utilisers

Next steps

- Complete data analysis of inexperienced driver sample
- Detailed analysis of SES and inexperienced driver samples to understand influence of training and other factors on cue utilisation

Potential applications and uses

- Inform training activities
- Objective measurement of cue utilisation, skilled risk assessment, and (potentially) organisational ‘norms’

Thank you!
Any questions?

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