Communicating flood risk: Simplifying Language and Terminology for Community Decisions

Stage one: Review

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Research program

Stage 1: To review existing domestic and global applications of flood language, terminologies, and colours against good practice risk communication principles.

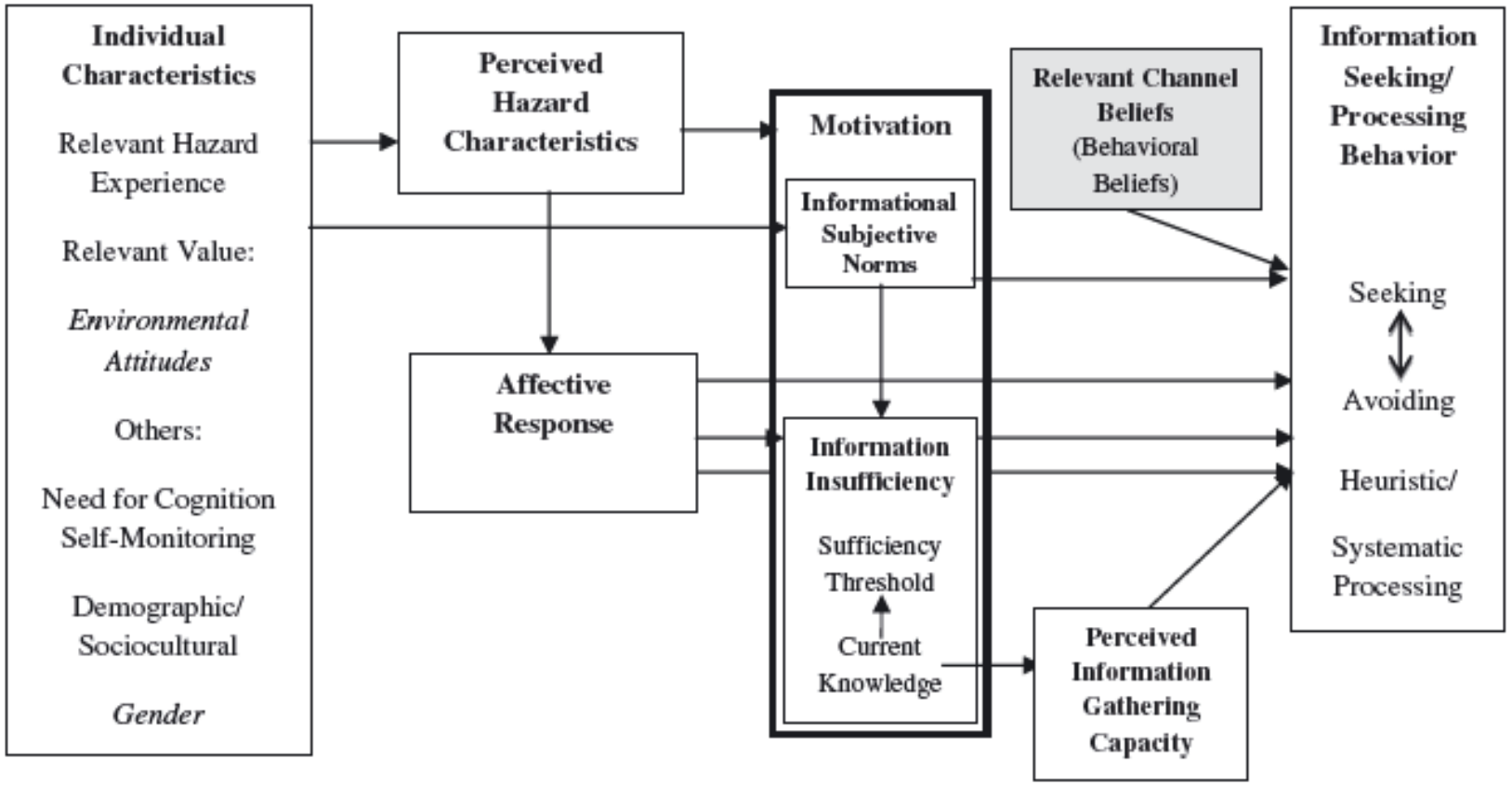
Stage 2: To discover how and why (i) organisational stakeholders create, disseminate, and evaluate existing material and (ii) communities, including those from diverse backgrounds, understand and use existing materials including language, terminology, and colours in planning and selected disaster phases.

Stage 3: To co-design language, terminologies, and colours for flood risk communication.

Stage 4: To test and present evidentiary support and guidelines for optimal flood risk communication.

Stage one: Focal theory

Risk information seeking and processing (Griffin et al., 2012; Yang et al., 2014)



Data collection

User profiles

LGA Planning profile

LGA Disaster profile

Sector profile

LGA sources

NSW: Maitland City Council, City of Wagga Wagga, Tweed Shire Council, City of Wollongong, City of Newcastle, City of Parramatta
QLD: Logan City Council, Goondiwindi Regional Council

Sector sources

Australia: Bureau of Meteorology, ABC, ICA
NSW: Reconstruction Authority, State Emergency Services, Planning, Housing and Infrastructure
QLD: QRA
USA: FEMA, EPA, NWS

Findings: Content

- **Source**: The majority of materials identified at least one source that was deemed authoritative.
- **Hazard**: All types of flood were identified in the dataset though with variation across user and sector profiles. It was rare to see definitions across the dataset.
- **Guidance**: Strongest emphasis for guidance or instruction-based content was found in the sector profile followed by LGA disaster and then planning.
- **Location**: Location content was more often absent than present across the profiles.
- **Timing**: Content about timing was rarely included across the dataset.
- **Further information:** Further information points were provided across the sample, with lower frequency for the planning profile.

Findings: Style

Level of clarity, specificity, consistency, sufficiency, and engagement

- **Text**: Strongly demonstrated.
- **Visual:** Strongly demonstrated.

Terminology: Technical terminology was infrequent across data set (e.g., Annual Exceedance Probability, Probable Maximum Flood).

TWEED SHIRE COUNCIL

Property Flood Report

This Property Flood Report tells you what you need to know about this property and its flood risk. It shows house floor and flood levels and provides information on nearby levees and river gauges, if applicable. To understand the terms used, please see the Flood Terms and Definitions section at the end of this report.

Property Address: [redacted]

Lot/Section/Deposited Plan: [redacted]

Date Prepared: 18/09/2020

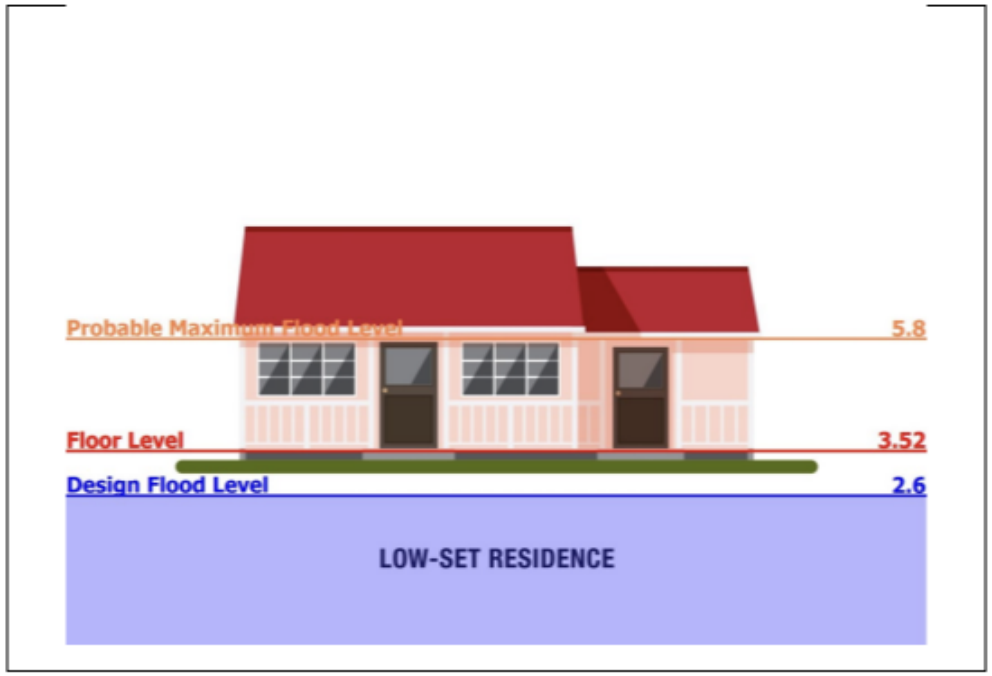


Figure 1: Flood and Floor Levels at [redacted]

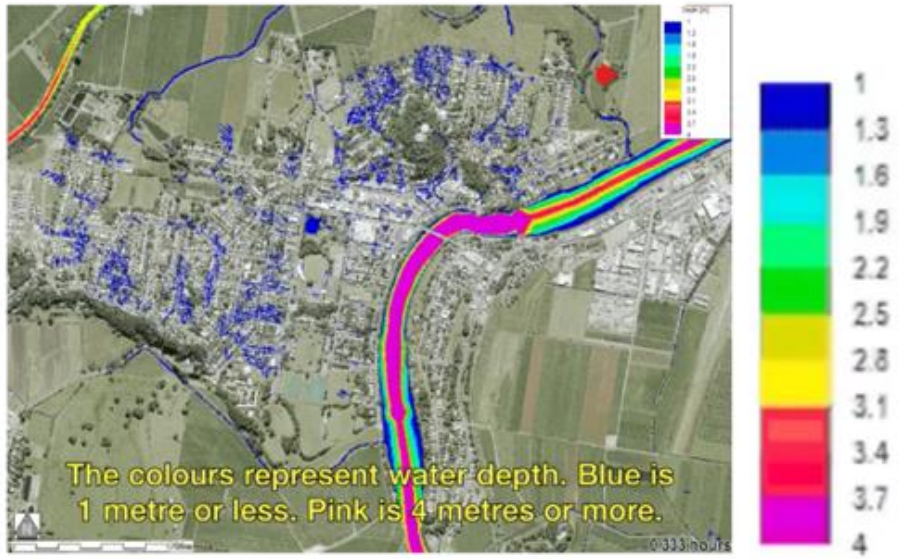
The house floor level provided above was taken in 2012 and is approximate only. If an accurate floor level is required this should be confirmed by a registered surveyor.

Findings: Colour

Colour use:
- Frequent symbolic use
- Frequent colours: Blue, green, red, yellow, and orange

Colour vision deficiency assessment: Moderate consideration given to CVD with opportunities for investigation and review.

No change/ Original design:



Deuteranopia simulated:

Next steps

Scope and focus discussions

Primary data collection

Co-design and validation