



Flood Evacuation Assessment Guideline and Tool

Steven Molino, Steve Opper, Mel Howard

Three Products

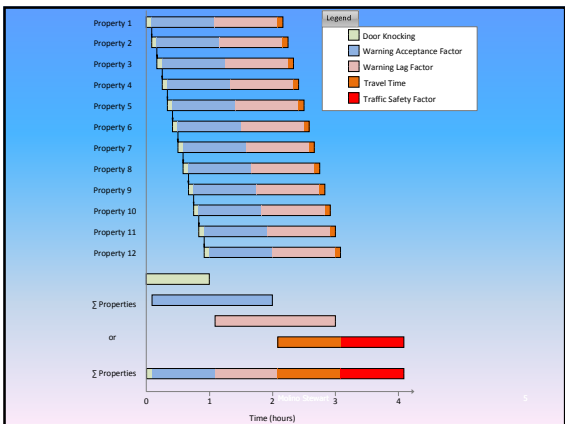
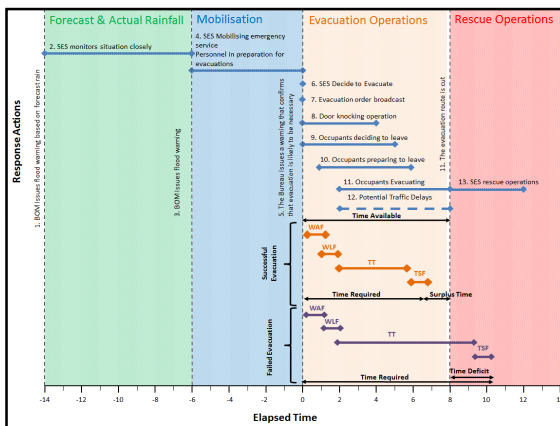
- Summary Guideline
- Technical Guideline – several appendices
- Calculation tool – Excel spreadsheet

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Evacuation Timeline Model

- Surplus Time = Time Available – Time Required
- or $ST = TA - TR$

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Time Required

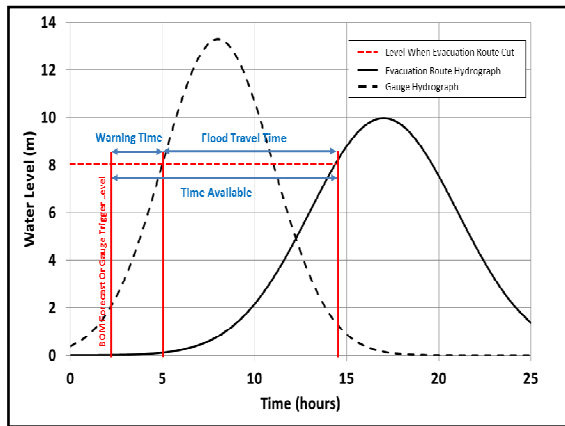
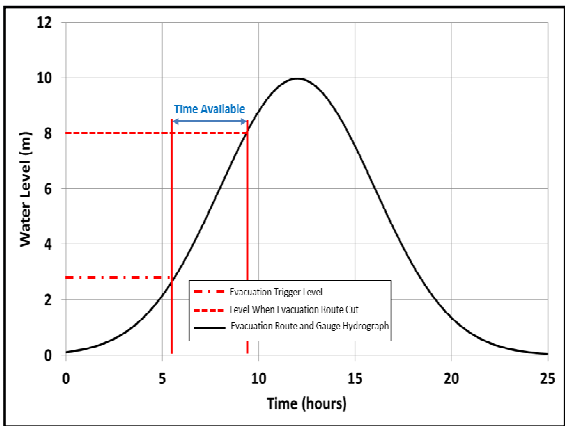
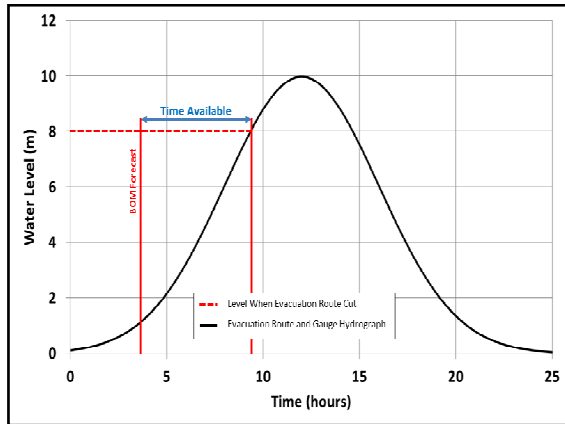
- $TR = DK + WAF + WLF + TT + TSF$
- $DK = 0$ (if can use road capacity)
- $WAF = 1hr$
- $WLF = 1hr$
- $TT = TV/RC$
- $TSF = 1-3.5$ hrs depending on TT

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Time Available

- $TA = WT + FTT$
- WT = warning time is from evacuation trigger time to when route is cut

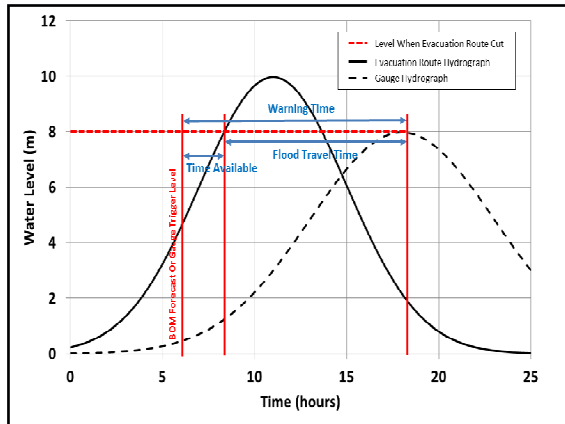
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Appendices

- Flood Warning Products
- Technical Guideline to modelling
- Model Variables and calculations
- Links to relevant data sources
- Case studies
- Standard tool description and user guide
- Modelling check list
- FAQs

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Other Important Considerations

- Traffic Convergence
- Local Flooding
 - Closing evacuations routes
 - Triggering evacuation
- Safety Margins
- Consequences of Evacuation Failure
 - Emergency response classification
 - Pedestrian evacuation
- Sensitivity of Variables

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The Tool

- Eight Worksheets
- 1 – general instructions
- 2 – SES recommended input values
- 3 & 4 – Other input data and evacuation calculations for two communities respectively
- 5 – Traffic convergence calculations
- 6 & 7 – Pedestrian evacuation calculations for two communities respectively
- 8 – report summarising inputs and outputs and provision for maps

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- [Copy of Standard Tool Draft ver3.xlsx](#)
- [Copy of Standard Tool Draft ver3 WORKED EXAMPLE.xlsx](#)

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