

**MOVING FROM REGIONAL TO
NATIONAL “HOTSPOTS”**

EXERCISE RUAUMOKO

- ***Exercise Ruaumoko '08 – Final Exercise Report* recommended that**
 - MED, in conjunction with MCDEM and the Ministry of Transport, should lead work across government agencies to establish a process for identifying and addressing lifeline utility vulnerabilities that are of national significance
 - “HOTPOTS!”
- **Earlier Hotspots work has been undertaken by many Lifeline Groups**

INITIAL STEPS TOWARDS NATIONAL METHODOLOGY

- **Initial work getting underway to consider national methodology**
 - Commissioned by NELC and MED
- **Approach will involve**
 - Reviewing Lifeline Group work
 - Suggesting national criteria
 - Considering modelling capability

WHAT WE WANT TO DO TODAY

- **Note some Ruaumoko learnings**
- **Start a conversation**
- **Draw on your thoughts and experience**

SOME LEARNINGS FROM RUAUMOKO

- **The *Final Ruaumoko Exercise Report* noted (inter alia)**
 - Vulnerability around Auckland Isthmus
 - Outage impacts extend to Northland
 - Benefits in mitigation planning
 - Need for better information on current and planned mitigation
 - Importance of Lifeline Utility Coordination function
- **The *Final Report* also recommended that Auckland CDEM Group should ask lifeline utilities to report on current and planned mitigation**

FURTHER NELC / AELG RUAUMOKO WORK

- **NELC & AELG commissioned further work to draw together Ruaumoko learnings at sector level**
- **Workshops 12 and 13 August – also considered post-eruption scenario**
 - Much mitigation progress has been made
 - More can be done – not all of it very expensive
- **Main themes**
 - Staff safety
 - Site access
 - Ash management
 - Availability of needed inputs, including
 - Sub-contractors
 - Services of other Lifelines

WHAT ARE THE CRITERIA FOR “HOTSPOTS”?

Definition: Vulnerable areas where critical assets located

- Areas where
 - significant hazards arise
 - infrastructure assets are located / co-located
- Assets that serve
 - the whole country
 - major cities
 - major activities (incl government?)
 - other assets that serve the above
- Absence of work-arounds

MUCH NATIONALLY IMPORTANT INFRASTRUCTURE IS CO-LOCATED IN AUCKLAND

- **Electricity:** Transmission lines to north part of Auckland, Northland
- **Petroleum:** Major pipe from Marsden Point, Wiri terminal
- **Gas:** High pressure pipeline to north of Auckland
- **Telecommunications:** Main fibre lines, exchanges
- **Transport:** Auckland Airport, state highways, harbour bridge, ports, main rail line
- **Water:** Major pipe from south, Mangere Wastewater Treatment



WHAT'S IMPORTANT IN YOUR REGION?

- What assets?
- What downstream / cascade impacts?
- What alternatives / “work-arounds”?