



Understanding disaster science

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Aims

- To build a better understanding of the science behind disasters
- To identify and share science that leads to the reduction of disaster impacts
- To conduct multi-disciplinary research including management, land use planning, psychology and economics
- To collaborate with international colleagues and share information and experiences

Projects

A photograph of a volcanic eruption. A large, dark plume of ash and smoke rises from a central vent in a volcanic crater. The surrounding landscape is rugged and rocky, with some smaller vents visible. The sky is a pale blue, suggesting a clear day. The overall scene is dramatic and powerful.

Project 1: Understanding physical processes inside a volcano (Mark)

Project 2: Understanding a volcano's impact on agriculture (Heather)



Scientific Methods

The science behind volcanoes

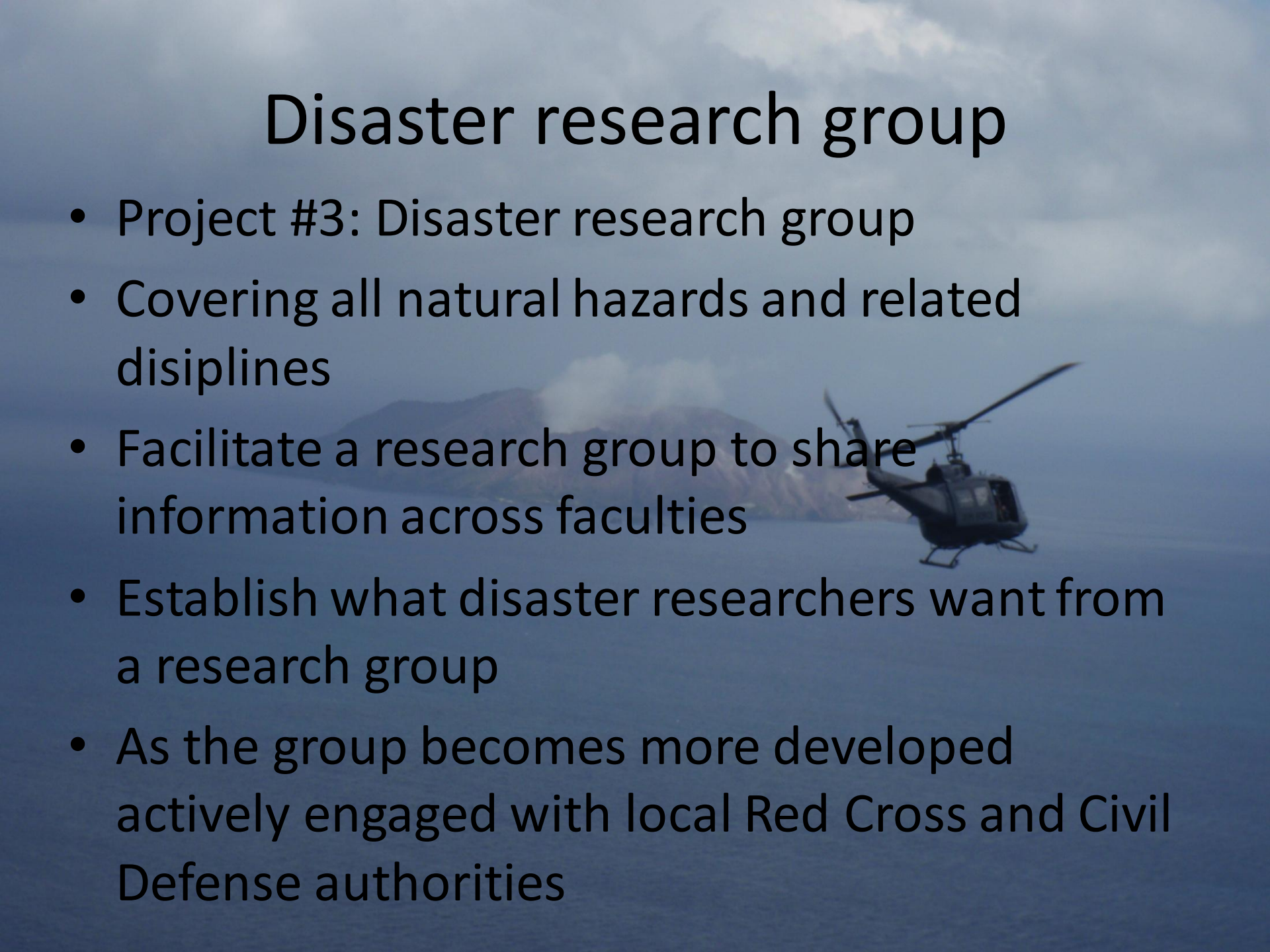
We hope to present key results with:

- Posters
- Attendance at a Geological Science conference
- Attendance at the next UNESCO Youth Forum

Secured budget

- Project #1: University of Canterbury Geology Department, Marsden Research Fund, Stipend from Academic supervisor
- Project #2: Civil Defence Sub-Contract, University of Canterbury Masters Scholarship, Marsden Research Fund, Pukehou Poutu Scholarship

Disaster research group

- Project #3: Disaster research group
 - Covering all natural hazards and related disciplines
 - Facilitate a research group to share information across faculties
 - Establish what disaster researchers want from a research group
 - As the group becomes more developed actively engaged with local Red Cross and Civil Defense authorities
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- A helicopter is shown in flight against a backdrop of a mountain range and a cloudy sky. The helicopter is positioned on the right side of the frame, with its rotors blurred from motion. The background features a range of mountains with some snow or light-colored patches, and the sky is filled with soft, grey clouds. The overall scene suggests a rugged, high-altitude environment.

Group Beginnings

- The group will start with a series of informal gatherings that will assess what the group is interested in and how they feel about the structure of the group
- As a group we will decide what we want to achieve and establish collective goals
- Contact will be made with RC, CD to let them know what we are doing and invite them to contribute ideas or things that we could do to be helpful to them

International and Domestic Links

- To maintain international links and awareness of new scientific ideas, more coordinated scientific research must be conducted with collaboration between academic disciplines (within a university or research institute) and different universities or research institutes (both domestically and internationally)
- This will be done using contacts met at this forum and at other conferences

Timeline

- Project #1 (Mark):
 - Experiments (August – November 2012)
 - Present early results at a Geology conference (early December 2012)
 - Discussion and producing MSc thesis (December – May 2013)
- Project #1 (Heather):
 - Lab work (August – November 2012)
 - Present early results at a Geology conference (mid November 2012)
 - Discussion and producing MSc thesis (December – March 2013)

Timeline

- Project #3 (Disaster Research Group):
 - Gaining department support and interest, promoting the group (August-September 2012)
 - Preliminary meetings (October 2012)
 - Contact with Red Cross, Civil Defense and international partners (before December 2012)
 - Recruit new members (February 2013, start of academic year)
 - Select new facilitators (March – April 2013)

Problems

- We may encounter issues with keeping the group motivated
- Hope to overcome this by keeping a team atmosphere and continuing to recruit new members
- Team building through community projects as the group becomes established
- Need to ensure that there is enough people driving the project after we graduate
- One avoided problem is that we would need no funding to launch the project

Contacts

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- If you have any contacts that you think we could include or would like to be involved yourself please email us