What can you do with your data?

Floods cost Australia over

$4.2m

annually[1]

1. Determine the **extent of a flood**

Identify the flooded area and the **potential for properties and infrastructure to be affected** through a flood extent map.

2. Determine the **depth of a flood**
by draping the forecast water surface onto a Digital Elevation Model (DEM).

Determine the **severity of flooding - in terms of depth - across a region.**

2,000ft^2
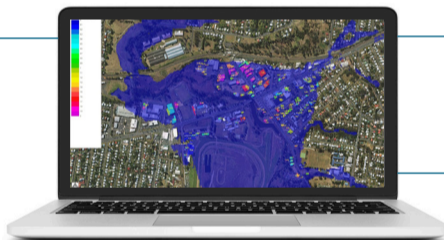home under 12" of water damage could cost roughly

$50k
in damages[2]

3. Determine the **impact of a flood**
by integrating GIS datasets with a flood forecast surface.

Forecast low points on evacuation routes to **determine what roads are passable or what facilities require managed evacuation.**

Predict the **depth of flooding 'above floor'** for flood-affected properties.

Use time-based flood forecasts to **determine not only what will be affected, but when.**

4. Manage **uncertainty**
by quantifying its upper and lower limits.

Plus or minus 20% to limit uncertainty regarding the extent a community will be affected by a flood and the response required.

In the Queensland floods of 2010/11

200,000
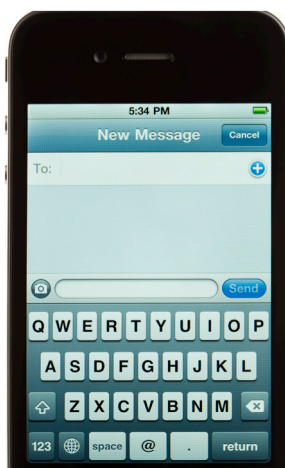people were affected and

35
lives were claimed[3]

[1]Preventionweb.net. (2016). Australia - Disaster & Risk Profile | PreventionWeb.net. [online] [Accessed 2 Sep. 2016].

[2]FEMA. "Cost of Flooding | Measure Flood Damage | Flood Tool." FloodSmart cited by Dosomething.org. (2016). 11 Facts About Floods | DoSomething.org | Volunteer for Social Change. [online] [Accessed 2 Sep. 2016].

[3]Australian Geographic. (2016). Floods: 10 of the deadliest in Australian history. [online] [Accessed 9 Aug. 2016].

5. Save **lives**

The above intelligence can be used by emergency managers to **plan and prioritise response effort**.

A simplified version can be pushed out to affected communities through **SMS alerts and web maps of affected areas.**

This can keep communities safe; **it can save lives.**

This is what you **can do with your data**.

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