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THE AUSTRALIAN NATURAL DISASTER RESILIENCE INDEX

A system for assessing the resilience of Australian communities to natural hazards

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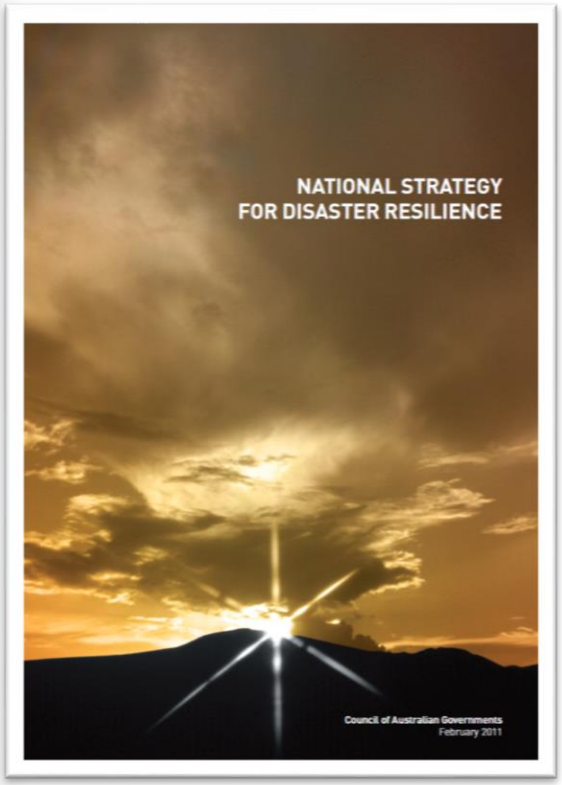
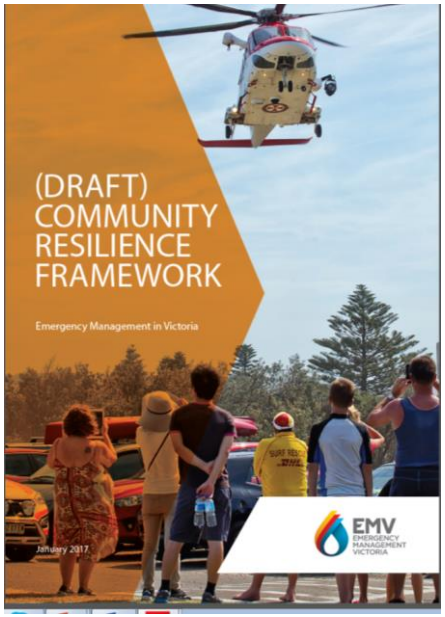
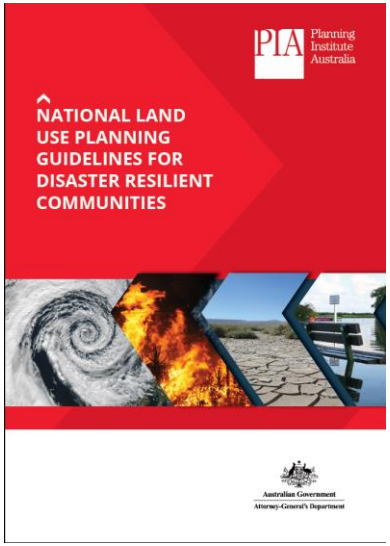
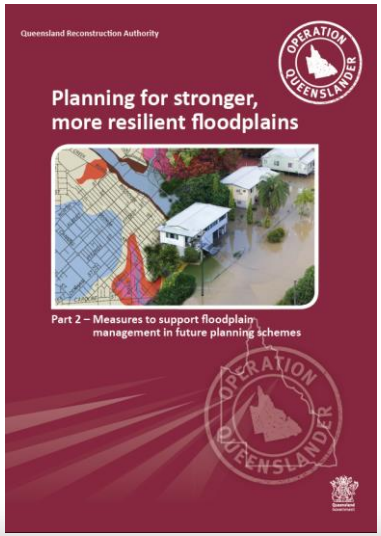
une University of New England

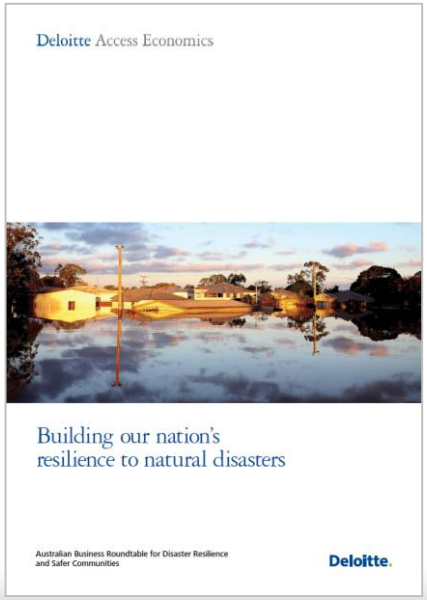
THE LANDSCAPE OF DISASTER RESILIENCE IN AUSTRALIA











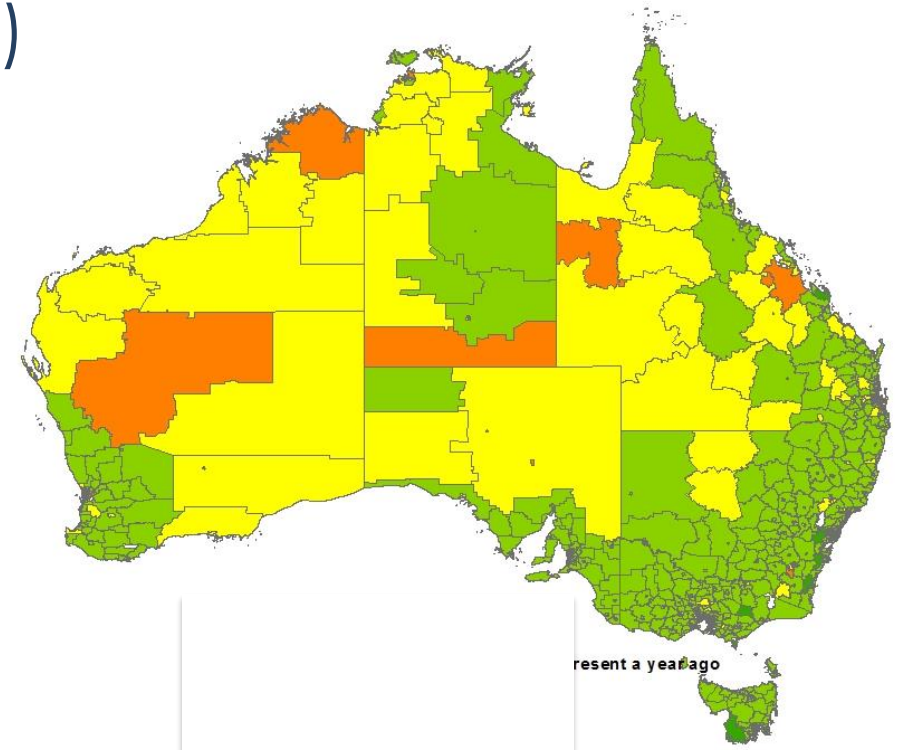
Project aim:

To develop an index that measures the current state of disaster resilience in Australian communities – the Australian Natural Disaster Resilience Index (ANDRI)

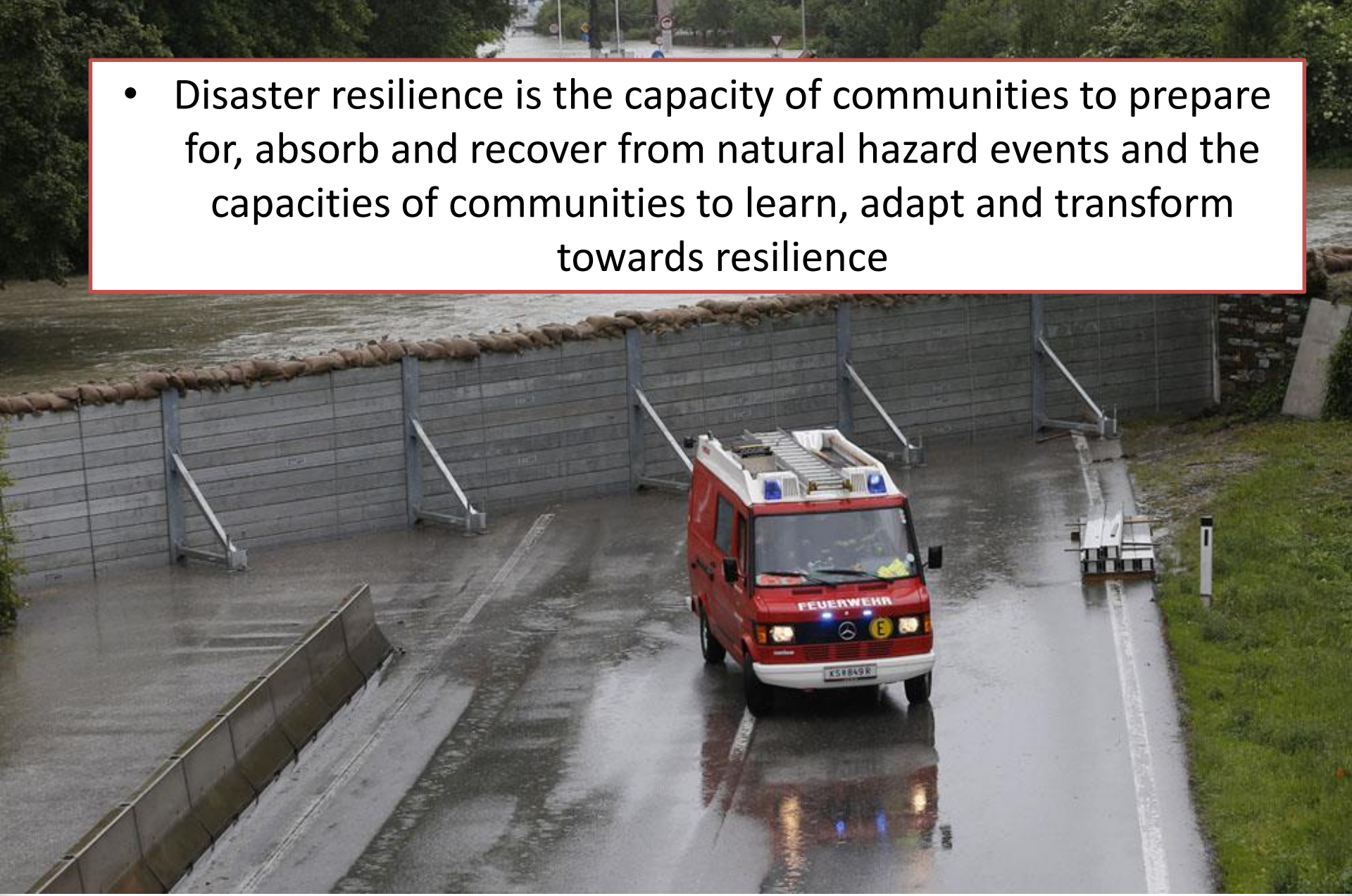
Major outputs:

- State of Disaster Resilience report
- Maps and Index

Index still in production



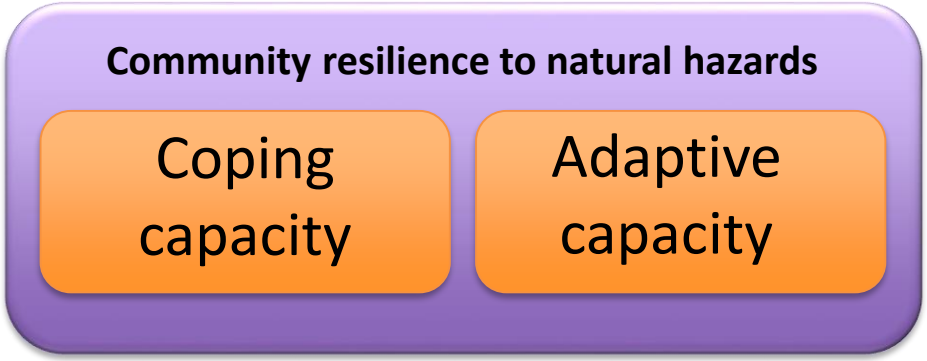
- Disaster resilience is the capacity of communities to prepare for, absorb and recover from natural hazard events and the capacities of communities to learn, adapt and transform towards resilience



Danube River flood barrier, 2013

Photo: Reuters, Leonhard Foeger

COPING AND ADAPTIVE CAPACITIES



The means by which people or organizations use available resources and abilities to face adverse consequences that could lead to a disaster (UNISDR 2004)

The arrangements and processes that enable adjustment through learning, adaptation and transformation

Factors influencing the ability to prepare for, absorb and recover from a natural hazard event

The facilitation of adaptation by governance, institutional, management and social arrangements and processes.

COPING CAPACITY

ADAPTIVE CAPACITY

Social capital

Social and demographic factors that influence ability to prepare for and recover from natural hazard events

Emergency services

The presence, capability and resourcing of emergency services, warning systems and disaster response plans

Governance, policy and leadership

Organizational enablers of learning, adaptation and transformation

Economic capital

Economic factors that influence ability to prepare for and recover from natural hazard events

Community capital

The cohesion and connectedness of the community

Community and social engagement

Social enablers of learning, adaptation and transformation

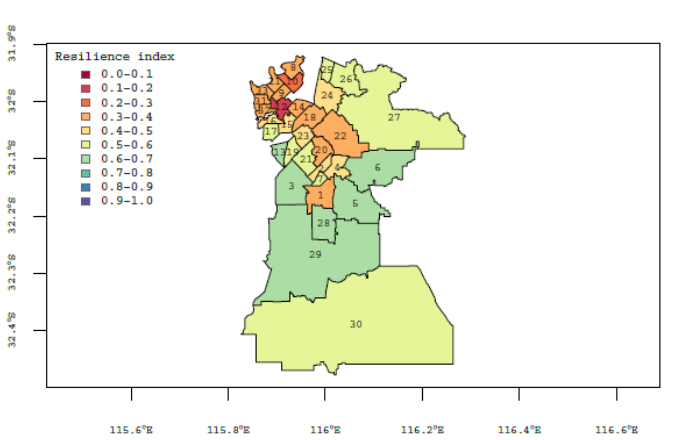
Infrastructure and planning

Preparation for natural hazard events using strategies of mitigation or planning

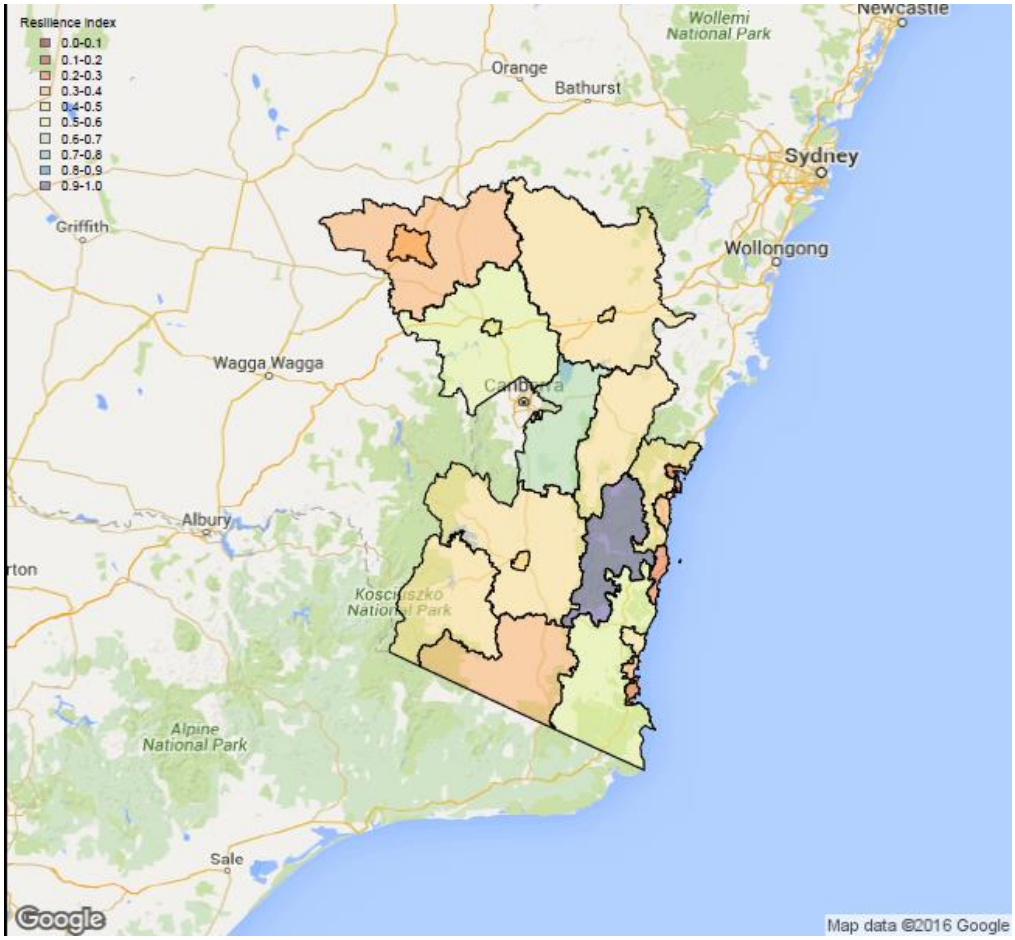
Information and engagement

Availability of natural hazard information, community engagement and partnerships to encourage risk awareness

DESIGNING THE STATE OF DISASTER RESILIENCE REPORT



Key	SA2	ANDRI	Family income ($/wk)	% renting	% >75 yrs	% no English	EDI
1	Armadale - Wungong - Brookdale	0.33	1124	36.08	6.81	1.39	0.88
2	Camillo - Champion Lakes	0.43	1300	25.83	3.52	2.01	0.87
3	Forrestdale - Harrisdale - Piara Waters	0.66	2176	13.21	0.72	1.68	0.88
4	Kelmscott	0.45	1402	26.16	6.58	1.24	0.93
5	Mount Nasura - Mount Richon - Bedfordale	0.66	1876	8.86	5.12	0.37	0.91
6	Roleystone	0.69	1976	9.55	3.35	0.42	0.91
7	Seville Grove	0.54	1545	23.47	1.81	1.21	0.87
8	Belmont - Ascot - Redcliffe	0.32	1699	37.92	6.74	3.33	0.84
9	East Victoria Park - Carlisle	0.34	1827	42.96	5.28	3.85	0.87
10	Rivervale - Kewdale - Cloverdale	0.28	1473	40.24	6.99	4.65	0.87
11	Victoria Park - Lathlain - Burswood	0.34	1943	47.99	4.23	4.28	0.84
12	Bentley - Wilson - St James	0.19	1301	47.85	11.45	5.97	0.93
13	Canning Vale - West	0.63	2154	12.34	2.07	3.29	0.93
14	Cannington - Queens Park	0.34	1468	40.66	4.01	7.71	0.92
15	Parkwood - Ferndale - Lynwood	0.45	1566	21.38	6.12	4.50	0.95
16	Riverton - Shelley - Rossmoyne	0.40	1917	25.00	8.32	3.00	0.91
17	Willetton	0.53	1977	17.95	4.16	3.45	0.93
18	Beckenham - Kenwick - Langford	0.39	1317	28.13	3.38	7.01	0.92
19	Canning Vale - East	0.59	2060	16.25	1.81	4.06	0.93
20	Gosnells	0.33	1271	29.47	7.54	2.68	0.89
21	Huntingdale - Southern River	0.58	1832	18.02	1.74	2.37	0.90
22	Maddington - Orange Grove - Martin	0.36	1304	22.66	6.10	4.05	0.87
23	Thornlie	0.48	1589	19.87	4.05	3.99	0.92
24	Forrestfield - Wattle Grove	0.48	1671	20.03	4.71	1.61	0.85
25	High Wycombe	0.53	1670	19.17	3.95	0.84	0.83
26	Kalamunda - Maida Vale - Gooseberry Hill	0.58	1922	12.18	7.65	0.54	0.91
27	Lesmurdie - Bickley - Carmel	0.56	1913	12.38	6.69	0.80	0.89
28	Byford	0.61	1797	15.37	3.07	0.43	0.84
29	Mundijong	0.63	1808	12.79	2.48	0.40	0.81
30	Serpentine - Jarrahdale	0.54	1587	15.82	3.84	0.48	0.74
31	Como	0.32	2039	42.99	8.23	1.98	0.82
32	Manning - Waterford	0.37	2132	29.60	8.06	3.20	0.86
33	South Perth - Kensington	0.39	2527	42.30	5.12	2.13	0.75



HOW WILL THE INDEX BE USED BY AGENCIES?

Castle Cove, Sydney Photo: RFS

Lismore floods Photo: Peter Hunt, AAP

- Community profiling
- Community engagement
- Community planning
- Decision support tools
- Risk assessment tools
- Local emergency management planning