

## Floodplain Management

- Policy in practise:
- reduce risk to life and property (prioritising residential property)
- Tailor made or bespoke plans for individual communities



# RISK

• Risk = consequence x likelihood

	Consequence level											
Likelihood level	Insignificant	Minor	Moderate	Major	Catastrophic							
Almost certain	Medium	Medium	High	Extreme	Extreme							
Likely	Low	Medium	High	Extreme	Extreme							
Unlikely	Low	Low	Medium	High	Extreme							
Rare	Very Low	Low	Medium	High	High							
Very rare	Very Low	Very Low	Low	Medium	High							
Extremely Rare	Very Low	Very Low	Low	Medium	High							

Likelihood – frequency of occurrence, return period,

Consequence – impact on land use, eg commercial, residential, critical use



- Existing Risk 1955 Maitland, engineering works
- Future Risk 1980s, landuse planning; merit based policy
- Continuing risk 1990 Ningan, evacuation planning mgm





## Floodplain Management Process Engenders community participation and ownership

#### **Flood Risk Management Framework**



<u>FME</u> – In NSW Councils acts as FME, Council FPM Committee, Technical subcommittee



#### Flood Risk Management Framework



<u>Data Collection</u> – includes capturing community experience of previous floods: inundation (depth, extent) and ferocity (velocity, rate of rise) through community surveys



### **Flood Risk Management Framework** Floodplain Management Entity (FME) Level Sustainable governance arrangements **Knowledge hub Gap analysis** Management status Prioritisation, forward planning studies and works Management of flood risk Monitor and review Floodplain specific management processes **Data collection** Flood studies Floodplain management studies Floodplain management plans **Plan implementation**



<u>Flood study</u> – matching computer modelling of floods with community experience; finding agreement; building confidence.



### Flood Risk Management Framework



<u>FPMS</u> – exploring flood mitigation measures to reduce risk acceptable to the community



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**Plan implementation** 

<u>FPM Plan</u> – measure acceptable to the community; willing to pay

Communicate and consult





								FI	00	d	Ris	k P	reci	ncts	(FF	RP's	)							
	Low Flood Risk						Medium Flood Risk								High Flood Risk (& Interim Riverine Corridor)									
Planning Consideration	Essential Community Facilities	Critical Uittives	Subdivision	Residential	Commendal & Industrial	Tourist Related Development	Recreation & Non-Urban	Concessional Development	Essent at Community Facilities	Critical Ultrins	Subdivision	Residential	Commercial & Industrial	Tourist Related Development	Recreation & Non-Litten	Concessional Development	Essential Community Facilities	Critical Utilities	Subdivision	Residential	Commercial & Industrial	Tourist Related Development	Recreation & Non-Litten	
Floor Level		3										2,6 or 7	2 or 5	2	1	2,4 6		ľ		l			1	20
Building Components		2										1	1	1	1	1							1	,
Structural Soundness		3		2		3						2	2	3	2	2							1	•
Flood Affectation		2	2		2	2					1	1 or 2	1	1	1	2							1	1
Evacuation		2.	5	3. 4	4	3. 4					5	3,4	1,4	3,4	1	1 or 3							1	1
Management & Design	1	4,	1		1						1	Γ	2,3 5	2,3 5	2,3 5	2,3 5							2,3 5	1



### Plan Implementation

Existing risk – structural measures, funding Future risk - DCP,

Continuing risk - SES evacuation planning



## Floodplain Management – Community Education

- SES Flood Safe
- NSW Managing Flood Risk You Tube videos (10)
- FMA-UTS Floodplain Management subject



#### 49117 Floodplain Risk Management Description

This subject aims to teach students the main elements of floodplain risk management (FRM) as practised in New South Wale The FRM process in NSW provides for informed decision-making in the strategic management of flood risk through ar annonriate:

- of the catchment
- understanding of the variation in bazard across the floodplain and its different s understanding of the variable on In Azara across the thooppan and its anterent sources and the associated consequent for existing and future development assessment of options to manage flood rink to existing development through mitigation measures from a broad ensignetive consistent with the INS' Morio Arone Land Pallor assessment of options to develop the floodplain in consideration of flood hazard and behaviour to ensure that development extentia and conditions are consistent with the matternance of flood behaviour, the relational flood hazard development extentia and conditions are consistent with the matternance of flood behaviour, the relation of the sources of the source of the source of the source of the sources of the source of the sources of the source of the source of the sources of the sources of the sources of the source of the sources o
- and the objectives of the policy.

The subject is almed at a wide body of students seeking a detailed knowledge and background in FRM and associated land use planning issues in NSW. The subject is supported by the NSW Department of Environment and Climate Change and the Floodplain Management Authorities of NSW.





### Dorothea Mackellar ".....of droughts and flooding rains..."



