Lower Loddon Irrigators Recovery Package

Increasing resilience of farming communities on the floodplain

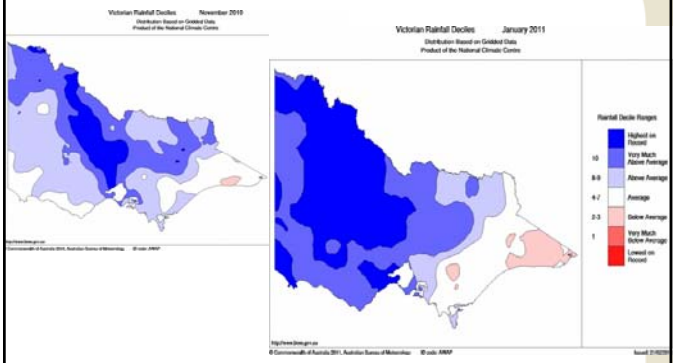
Department of Sustainability and Environment

Victoria

Australia is a land of droughts and flooding rains…

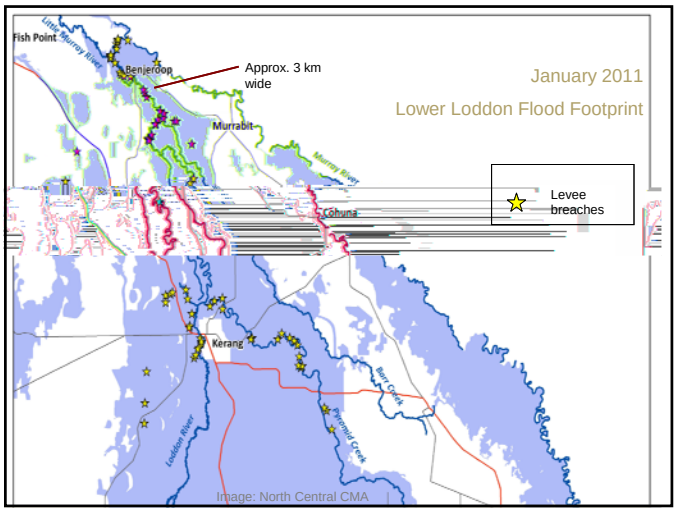
Image: Tropical Sky

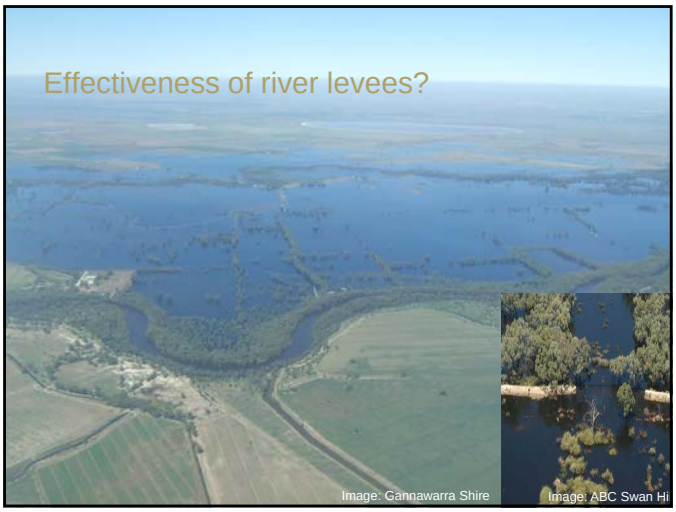
Victoria's 2010-11 Floods



Lower Loddon January 2011 Flood Event

Image: Department of Primary Industries


Fish Point
Benjeroop
Approx. 3 km wide
Murrabit
Cohuna
Kerang
Levee breaches
January 2011
Lower Loddon Flood Footprint
Image: North Central CMA


Effectiveness of river levees?
Image: Gannawarra Shire
Image: ABC Swan Hi


Flood response – protect key assets
Image:Gannawarra Shire
Image: Gannawarra Shire


March 2011…still inundated
Image: The Weekly Times
Image: Gannawarra Shire

Hardship, politics and flood recovery planning

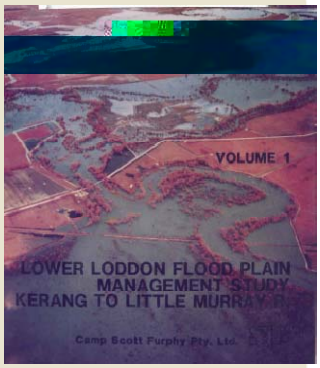
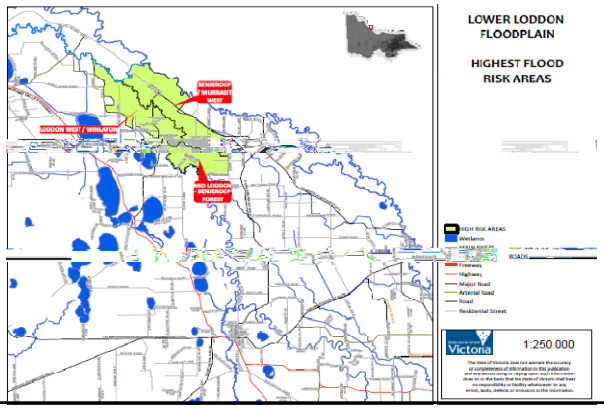


Image: The Herald Sun

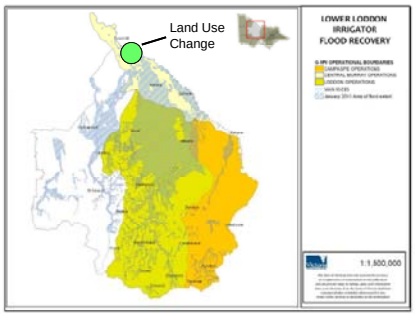
Action, not more flood studies

- Integrated water policy
- Multi-agency cooperation
- Regional leadership
- Resilience thinking

Targeted land use change



Facilitating Irrigator Recovery



Supply System Modernisation

Flood Recovery Objectives Achieved?

1. Reduce the risk to farm businesses
2. Reduce the risk to dwellings and other key assets
3. Reduce the risk of government investment in land use not compatible with the flood hazard

Flood Recovery: Land Use Change and Asset Protection

Land Use Classification (2008-09)	*Pre-flood (hectares)*	*Post Flood Recovery Package*
Livestock - Dairy Cattle	831	↓
Ex Dairy - Fodder Production / Mixed	914	↓
Irrigated Cropping	2526	↓
Domestic Livestock Grazing	0	↑
Livestock - Beef Cattle	65	↑
General Cropping (> 20 ha)	1214	↑
Residential / Lifestyle (0.4 - 20 Ha)	34	↓
Vacant Residential / Lifestyle (0.4 - 20 Ha)	16	same
TOTAL	5,600 ha	2500 ha with changed land use

Ring Protection levees

Lessons learnt

- Incentive funding must be sufficient for irrigators to afford to relocate
- Have acceptable options for the most vulnerable landholders who do not want to relocate
- Timeframes need to be clear and upfront to provide certainty in decision-making
- Be flexible to landholder needs

Lessons learnt

- Structural change is a bitter pill, that requires clear technical and economic justification
- Land use change requires clear eligibility criteria and priorities, regional leadership and a steady hand
- Face to face contact and empathy is important
- Don't rely on the media or a single committee to keep the community accurately informed

Questions?

Flood Risk Assessment = Likelihood x Consequence

Area Description	Flood Hazard	Social, economic, environment conditions	Key Infrastructure at Risk	Flood Risk
Benjeroop/West Murrabit area.	• Medium frequency, large depths and long duration (weeks to months) in large floods • Relies heavily on effectiveness of Loddon levees • Drainage is problematic due to ponding.	• Land use intolerant to flood – dairy and crop irrigation. Some 'lifestyle' farms. • Access liable to isolation • Rescue and relief high difficulty • Salt affected land adjacent to east bank.	• No. 4 channel and private channels • Murrabit urban development • Murray levees • Local roads	Very high
Loddon West/Fish Point	• Medium frequency, moderate depths and duration (multiple weeks) • Relies heavily on effectiveness of Loddon levees • Drainage is problematic due to large area impacted	• Larger mixed farms at Loddon, dairying at Fish Point • Access poor but not isolated • Rescue and relief moderate difficulty • Salt affected land adjacent to west bank and Little Murray	• Barr Creek salt drain • Little Murray levees • No. 5 channel and private channels • Local roads	High
Benjeroop Forest area	• Medium frequency, shallow to moderate depths and duration (days to weeks) • Relies heavily on effectiveness of Barr Creek levees • Drainage poor	• Land use intolerant to flood – dairies and mixed farms with irrigation. • Access poor but not isolated, few houses • Rescue and relief moderate difficulty	• Local roads • Public and private channels and banks	High