


PITTWATER COUNCIL


ADAPTATION FUTURES 2016

**Achieving Bottom-up
Adaptation through
Local Planning Policy
at the Development
Consent Stage**

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Bottom-up Climate Adaptation





Local Environmental Plan & Development Control Plan


Hazard Controls



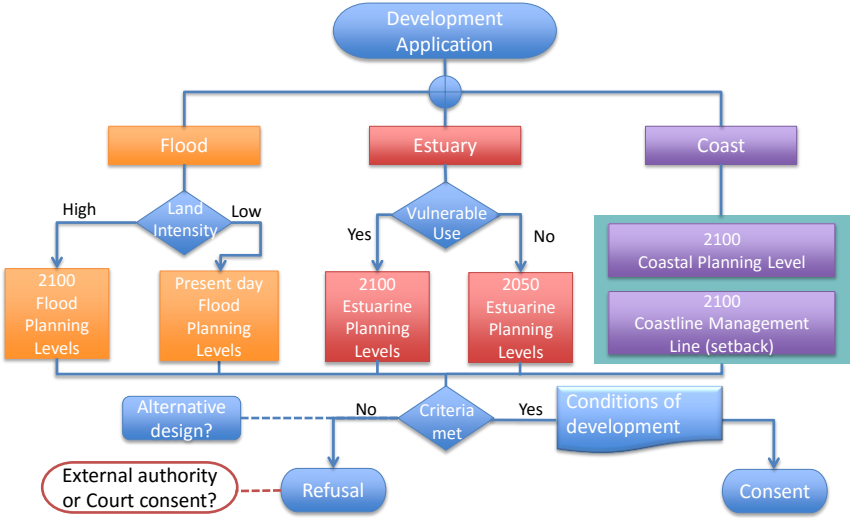
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Climate Change



Development Consent



Policies to Practice



FLOOD PROTECTION



ESTUARINE ADAPTATION



COASTAL ACCOMMODATION

- 175 survey respondents – 80% thought that an uncertain future climate should take into account Flood Planning Levels
- About 50% nominated restrictions on new development to manage flood risk
- Challenges to planning controls based on hazard rather than climate change
- Lot-based development favours building defences over retreat options
- Time limited approvals unreasonable?



General Development Conditions

Minimum Flood/Estuarine/Coastal Planning Levels

- habitable and non-habitable floor levels
- all access points and potential water entry points
- carpark levels and entry crest of basement carparks
- new subdivisions in land release areas



Flood-proof below Planning Levels

- electrical equipment, power points, wiring, fuel lines or any other service pipes and connections
- use flood compatible materials for all structural elements below the planning level



General Development Conditions

Allow for free passage of flood waters

- construction on piers
- no buildings or open carparking over floodways
- flood compatible fencing



Ensure safety of occupants

- storing hazardous materials above the planning level
- implementing a Flood Emergency Response Plan
- compliance with the Flood Risk Management Plan
- Flood risk to life response by sheltering on-site in upper storey



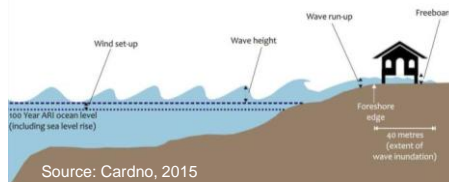
Planning Level	Land Use Group	Flood Life Hazard Category			
		AL1-H24	AL1-H24	AL1-H24	AL1-H24
Building on Piers	Permitted use and development	No condition	10.2.2.4.10a	10.2.2.4.10a	10.2.2.4.10a
	Commercial	No condition	10.2.2.4.10a	10.2.2.4.10a	10.2.2.4.10a
	Residential	No condition	10.2.2.4.10a	10.2.2.4.10a	10.2.2.4.10a
	Public Facility	No condition	10.2.2.4.10a	10.2.2.4.10a	10.2.2.4.10a
Building on Floodway	Permitted use and development	No condition	10.2.2.4.10a	10.2.2.4.10a	10.2.2.4.10a
	Commercial	No condition	10.2.2.4.10a	10.2.2.4.10a	10.2.2.4.10a
Building on Floodway	Permitted use and development	No condition	10.2.2.4.10a	10.2.2.4.10a	10.2.2.4.10a
	Commercial	No condition	10.2.2.4.10a	10.2.2.4.10a	10.2.2.4.10a
Building on Floodway	Permitted use and development	No condition	10.2.2.4.10a	10.2.2.4.10a	10.2.2.4.10a
	Commercial	No condition	10.2.2.4.10a	10.2.2.4.10a	10.2.2.4.10a



Adaptive Solutions Example

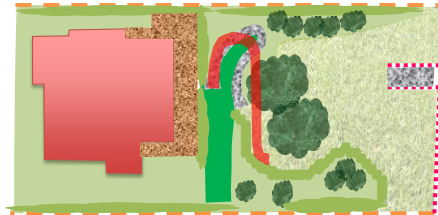
Development controls (via Court decision):

- Retained 2100 Estuarine Planning Level
 - Minimum habitable floor level
 - Entry crest into basement
 - Electrical services



Additional adaptation solutions:

- Re-orientation of access way to divert tidal inundation
- Resilient landscaping works and vegetation selection



Next Steps

- Continue to drive climate adaptation by local planning policy
- Extend hazard mitigation policies to incorporate climate change
- Build innovation into development consents
- Concurrently focus on climate resilience at a strategic level
- Encourage more top-down direction and regulation

