

Are we undervaluing business losses?

Steven Molino, Renee Fulton and Tim Morrison



Business Recovery After Flooding

- Business recovery is, to a large extent, overlooked compared to other recovery streams such as infrastructure and community recovery
- The lack of funding for small business recovery reflects a lack of appreciation of the critical interdependencies between business recovery and community recovery, particularly in regional settings where the majority of businesses are owned and operated by local residents
- Enabling business to re-open quickly is contingent on access to lifeline utilities such as telecommunications, power, water and transport networks such as road and rail
- Businesses that are forced to cease trading for a period of time may lose their customer base, which is often built up over many years and difficult to re-establish if suppliers and customers have had to seek alternative sources
- Delays in re-opening businesses as a result of flooding are exacerbated by delays in the approval of claims by insurance companies
- Locally focused small businesses are the most vulnerable as they lack the support mechanisms that are provided by parent organisations or governing institutional bodies to franchises, branch offices or primary producers
- Apart from immediate clean-up grants, businesses often receive very little government support or financial assistance to aid recovery
- Businesses overwhelmingly use internal sources to finance recovery, primarily absorbing their own losses and generally using personal savings, bank loans or insurance to fund recovery.

Standard Practice in

Floodplain Risk Management

- It is standard international practice to use stage-damage curves in the assessment of flood damages. .
- Stage-damage curves (or functions) graphically represent the relationship between expected loss and varying depths (stages) of flood water
- Stage-damage curves for commercial and industrial properties are more complex than for residential dwellings due to marked variability in flood losses between differing activities and the wide variation in property size.
- The most widely adopted stage-damage functions in Australia are those developed for the ANUFLOOD model, developed in 1983 and revised in 1994. Many studies have used the ANUFLOOD functions with adjustment factors to derive current values, based on CPI or AWE.
- Other studies in Australia adopt the FLDAMAGE model developed by Water Studies in 1992. FLDAMAGE is similar to ANUFLOOD in that it derives an estimate of total flood damages for inundated properties by applying stage-damage curves appropriate to each type of property
- The Department of Environment and Climate Change (DECC) (2007) notes however, that there is no definitive data available on flood damages and that no studies in NSW have been undertaken that calculate damages for a range of building types, ages and sizes following a reasonably large flood.

All values have been adjusted to 2013 AUD*

What has Changed?

There has been very little development in the area of damage estimation models for commercial and industrial flood damages in Australia since the early 1990s and most studies continue to use stage damage curves based on limited field data from floods in the 1970s and 1980s. Other jurisdictions such as the UK (see FLOODSite MCM (2010) below), USA and Germany have developed more modern stage damage curves.

Commercial and industrial premises have changed much since the 1970s and 1980s, particularly with changes in technology as well as changes to the industries that occupy our commercial and industrial space.



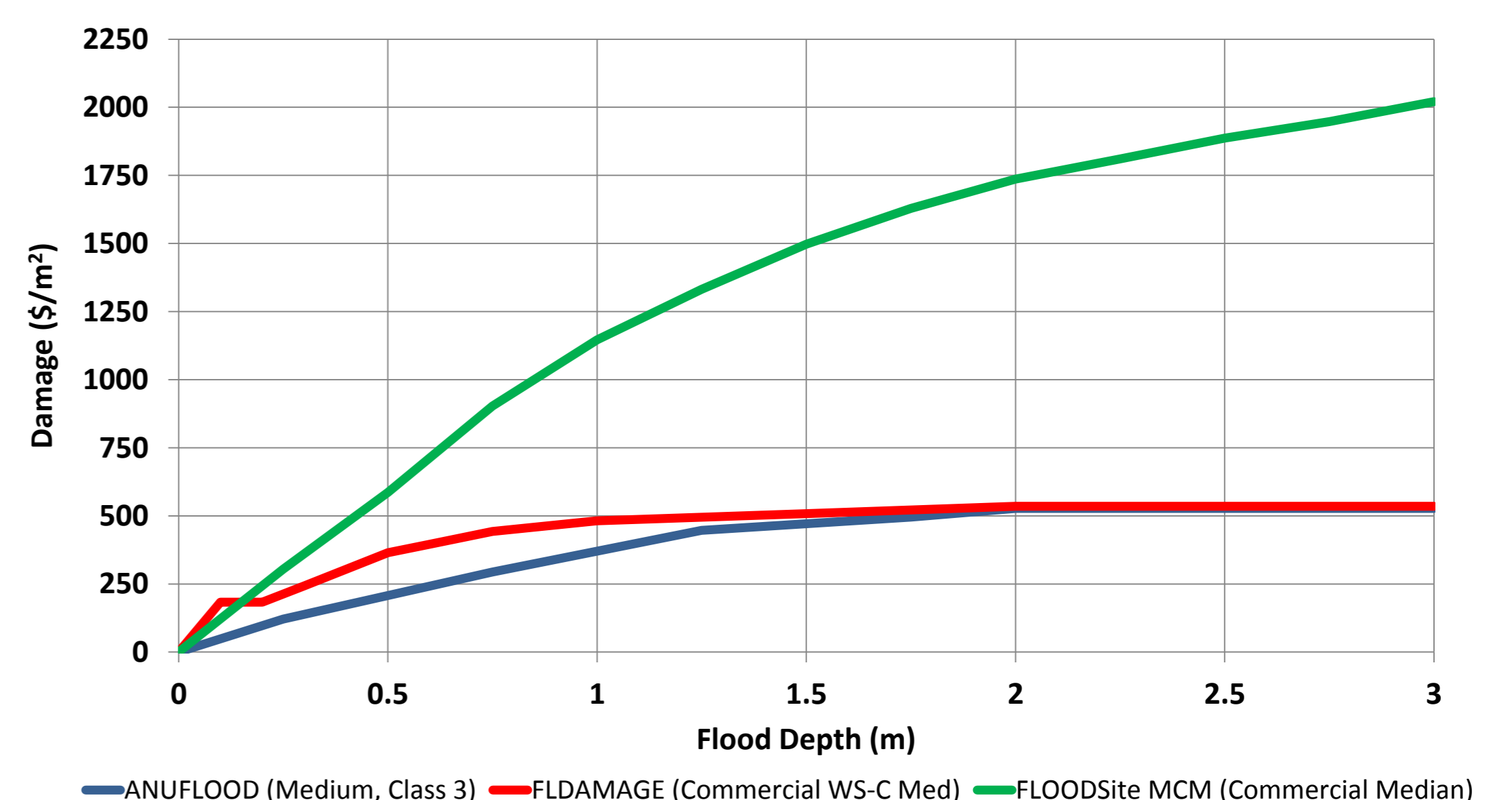
A modern look office



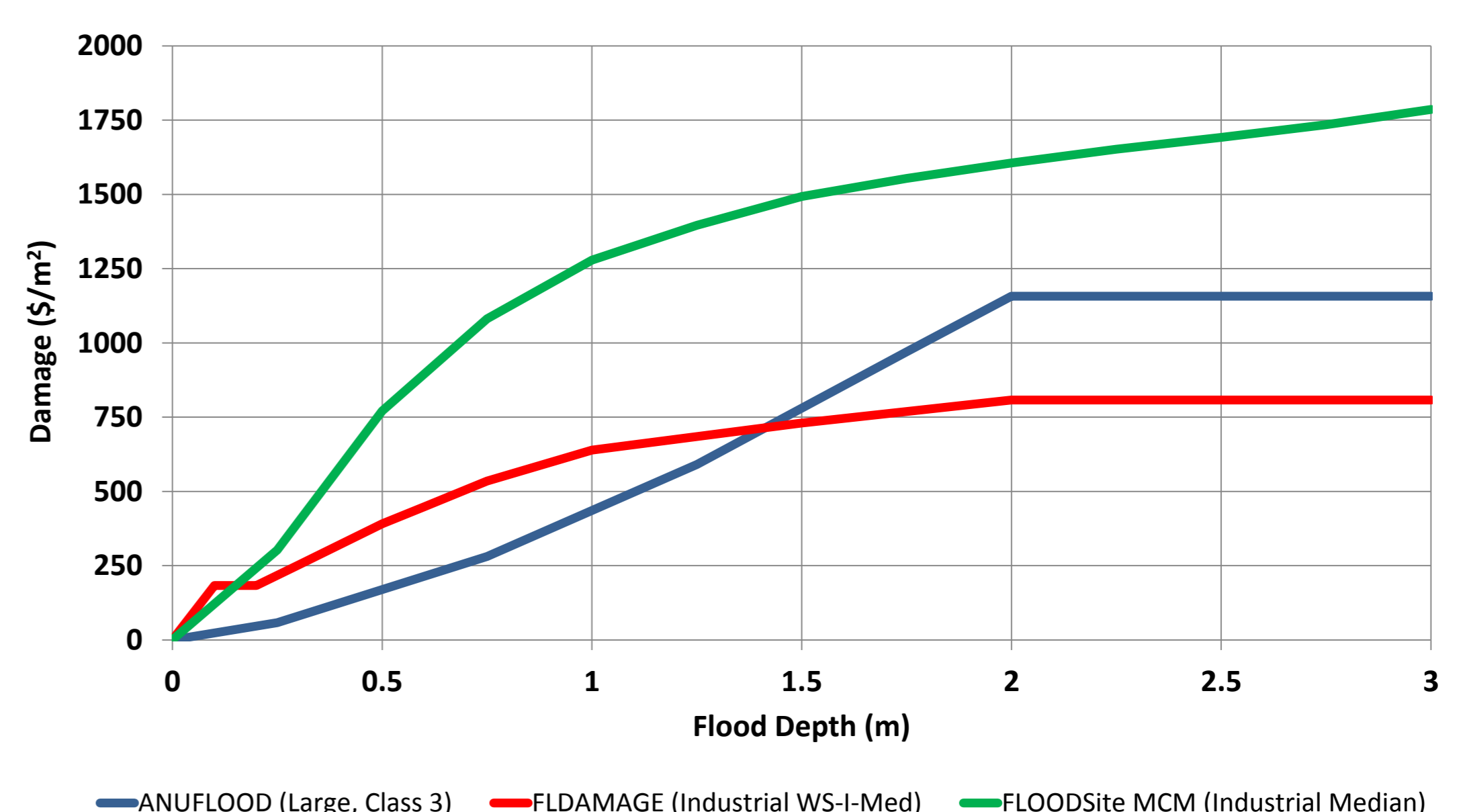
Photo of a UK accounting office taken in the 1970s

Stage Damage Comparison

Comparisons of the widely used ANUFLOOD and FLDAMAGE stage Damage curves developed based on data from floods in the 1970s and 1980s to the modern FLOODSite MCM (2010) stage damage curve developed in the UK confirms that there are significant differences that need to be investigated.



Comparison of Median Commercial Stage Damage Curves*



Comparison of Median Industrial Stage Damage Curves*