

Appendix 2: Hayling Island

Hayling Island presents a unique set of potential issues for development. Principally this surrounds the impact of climate change on the long term flood risk and resulting developability/suitability of the island for residential development. The following provides some facts and observations taken from key stakeholders relating specifically to Hayling Island:

Context

- Hayling Island is separated from the mainland by Langstone and Chichester Harbours
- Hayling Island is served by one road bridge to/from the mainland at Langstone
- There is no hospital or A&E facility on the island
- A first responders service is based on the island
- The island has a retained fire service
- Policing is primarily served from the mainland
- Council emergency planning services (including the council depot) are based on the mainland
- The island is largely flat with a mix of agricultural land and urban development. The larger proportions of the urban development are focused to the south of the island
- Much of the island is surrounded by a Special Protection Area (SPA). Various other nature and landscape designations also apply
- Some of the open land is important or uncertain for use by Brent Geese and waders
- Hayling Island is entirely below approximately 9m Above Ordnance Datum (AOD)

Flood Risk

- The Strategic Flood Risk Assessment (SFRA) shows the areas of the island and mainland to be at risk of flooding (see Figure 2). There is a significant amount of Flood Zones 2 and 3 (from coastal sources)
- At the request of the council the Environment Agency have provided data on likely depths of flooding at points around the main access on/off the island (shown in Figure 3)
- The main (and only) vehicular access on/off the island is likely to be submerged and potentially impassable in some high tide instances. The frequency of such events and depth of water are likely to increase (see Figure 3)
- The potential depth of flood water identified in Figure 3 is based on still water conditions. In reality waves/wind could make the ability to pass/cross flood waters more difficult
- Inland flooding will increase as tidal height restricts the ability of rain water to disperse into the sea
- Existing flood defences are in situ but their effectiveness is based on present day high tide levels (i.e. not climate change/not 2115 levels) and based on still water conditions
- Initial estimates for the costs of flood defences to cover the southern Langstone, north Hayling and north west Hayling coasts would suggest in excess of £30,000,000 flood defence costs

- The costs of new/upgraded flood defences is unlikely to be met through developer contributions based on current economic factors and viability
- Flood depths in excess of 0.5m are considered a 'danger for all' (including the emergency services) (Defra/EA R&D Report FD2320/TR2)
- Some emergency vehicles may operate in water of 1m (Defra/EA R&D project FD2321) but this will depend on type/size of the vehicle and the flow/velocity of flood waters
- Any implementation and possibility of flood defences will have to be balanced against nature and environmental considerations, particularly in relation to the SPA designation at the harbours

Figure 2: Extract from SFRA map showing areas at risk of flooding 2115



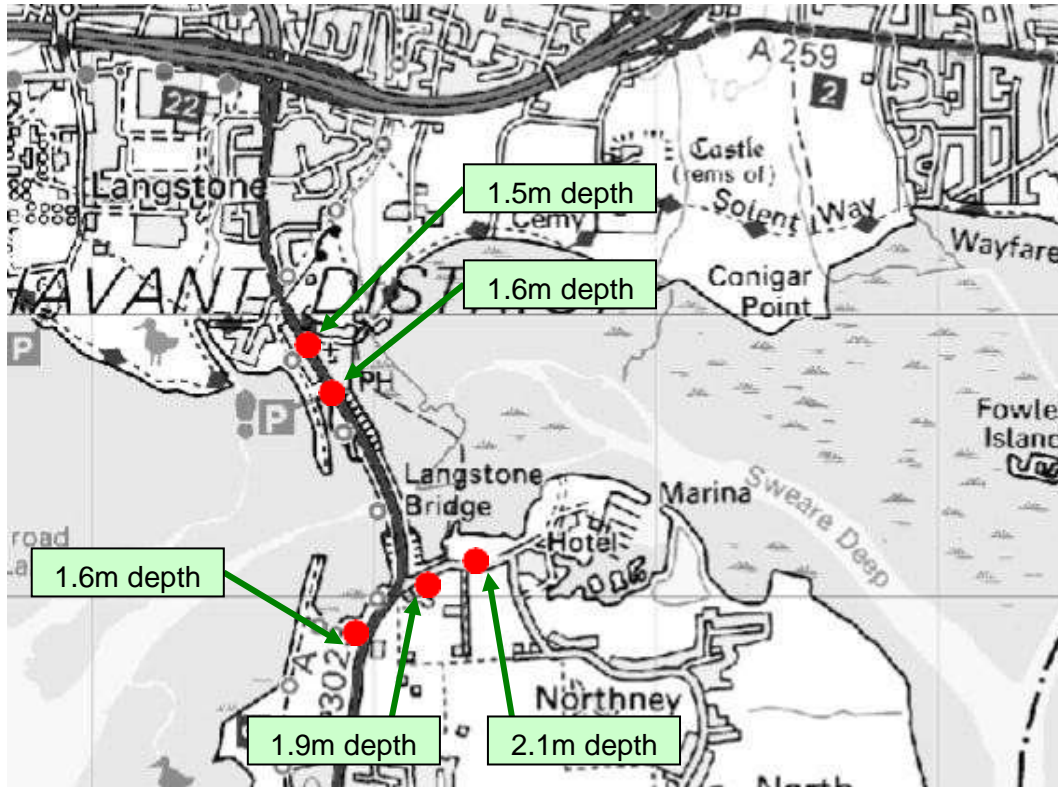


Figure 3: 2115 Indicative Flood Depths on Road Access (Source: PUSH SFRA and Environment Agency)

Further work with key stakeholders such as the Environment Agency, the Eastern Solent Coastal Partnership, Emergency Service providers, etc will be required to develop a greater understanding of the risks present to determine the most appropriate long term approach to residential development on the island. However, the evidence available at present (July 2014) is clear that flood risk to the only vehicular access on/off the island is significant in terms of frequency and depth during the lifetime of any new housing development. The potential depths of water will potentially prevent all vehicular access. If this were to be coupled with a storm event then other means of access/escape (e.g. sea/helicopter) may also be difficult or unavailable.

With these factors in mind it is considered appropriate to adopt a precautionary approach at this time. As such further potential housing sites on Hayling Island are not currently considered developable. This will be investigated and evidenced further as necessary and should a deliverable solution be found to overcome this constraint then this position could be reviewed.