

# Managing tidal flood risk in Southampton

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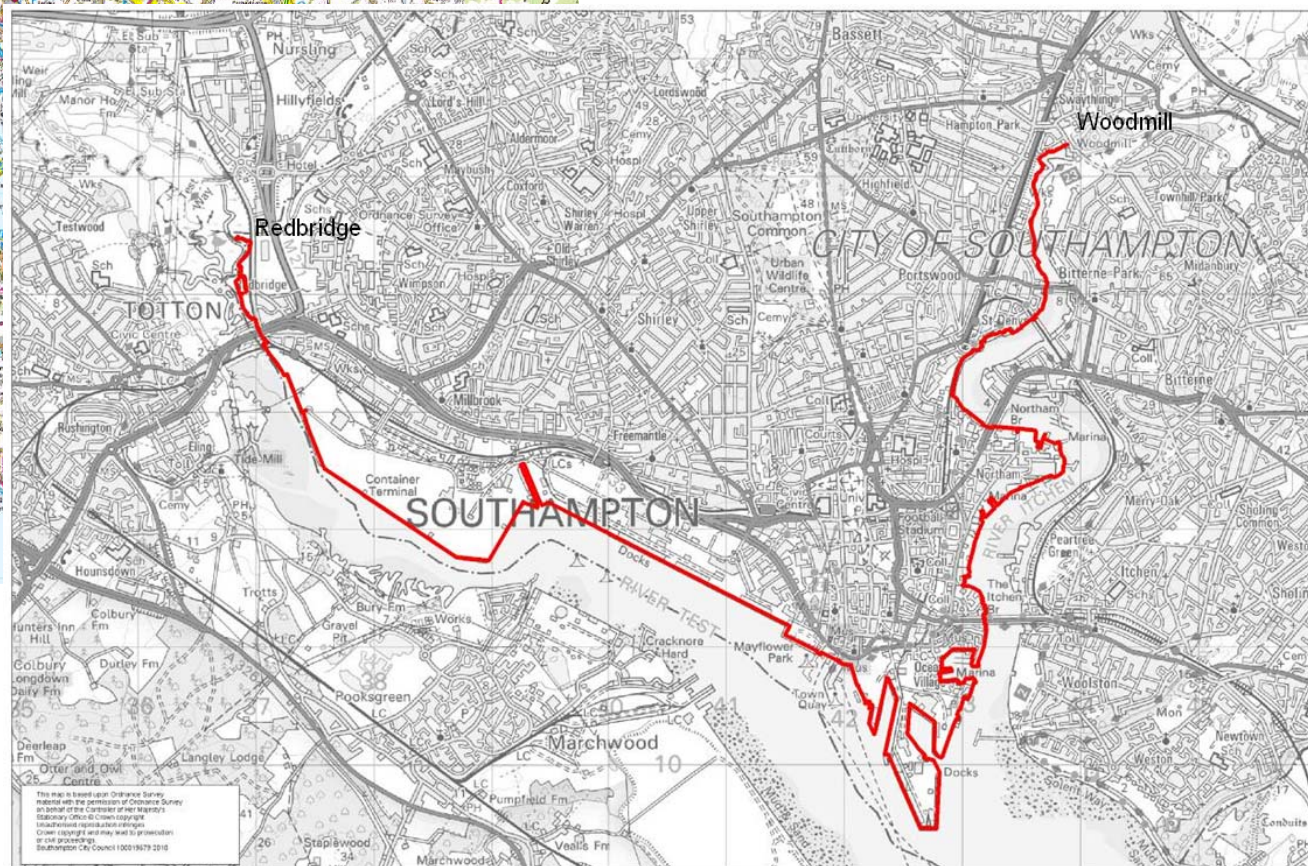
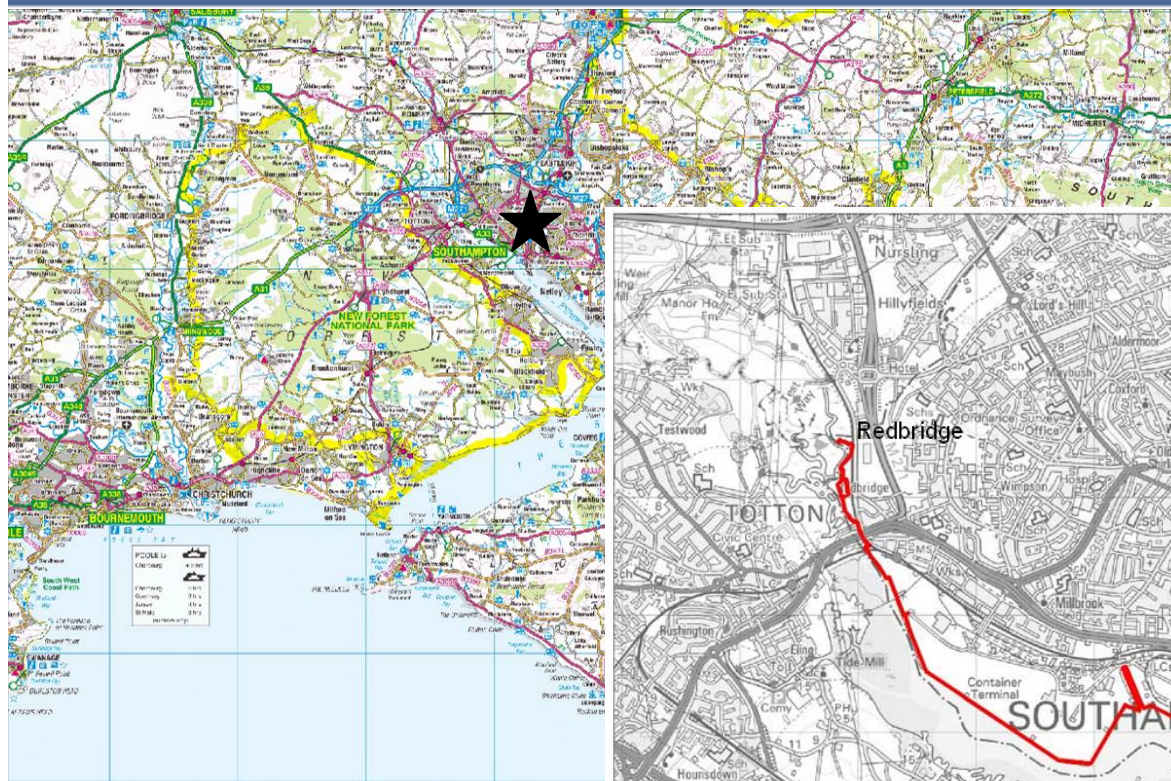
# Introduction

- Location
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- Assets at risk
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- Aim of the Strategy
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- Strategy options
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# Location





# Historic tidal flood events



**Upper Itchen, Boxing Day 1999**

# Historic tidal flood events



**Upper Itchen, 10<sup>th</sup> March 2008**

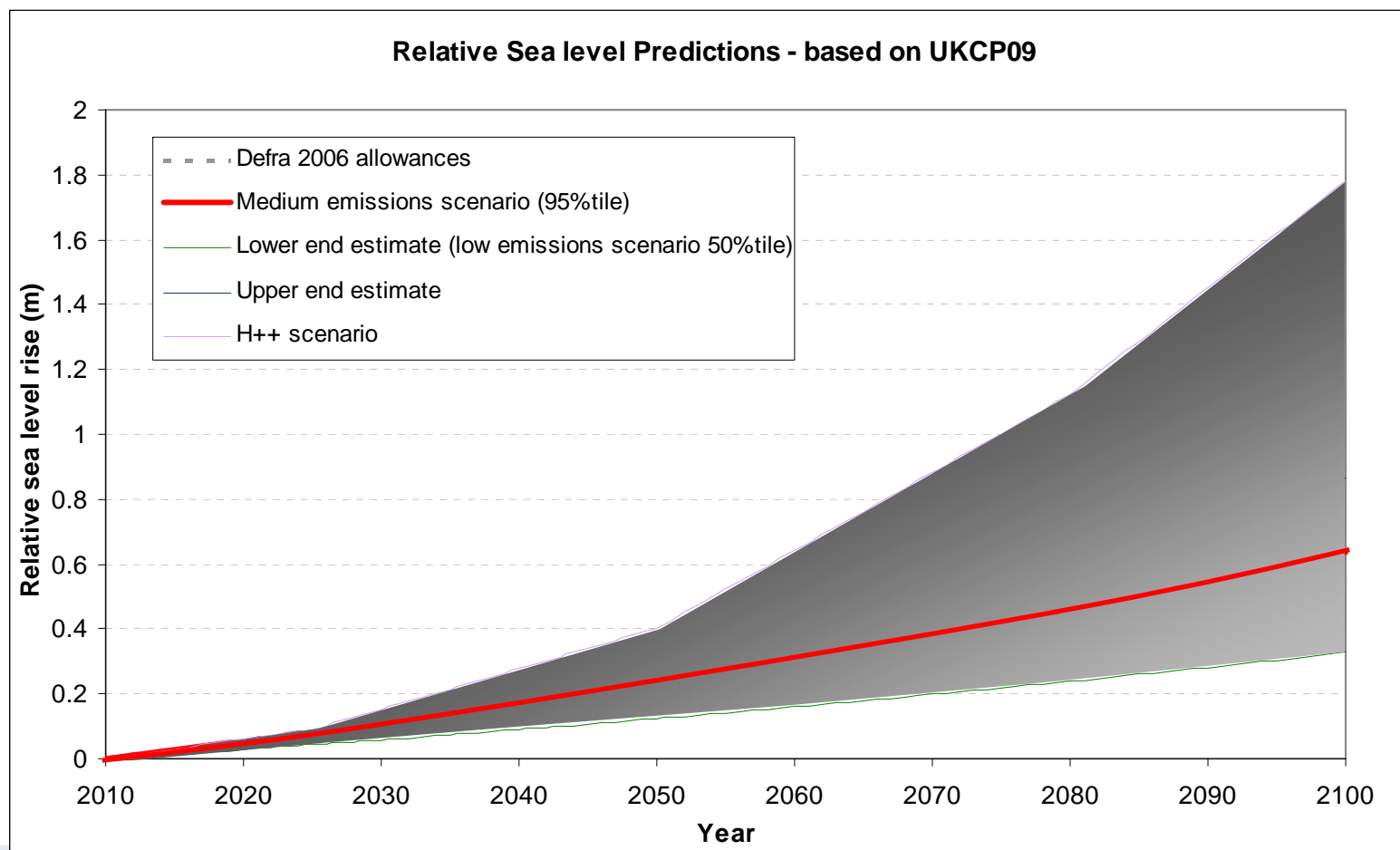


# Historic tidal flood events

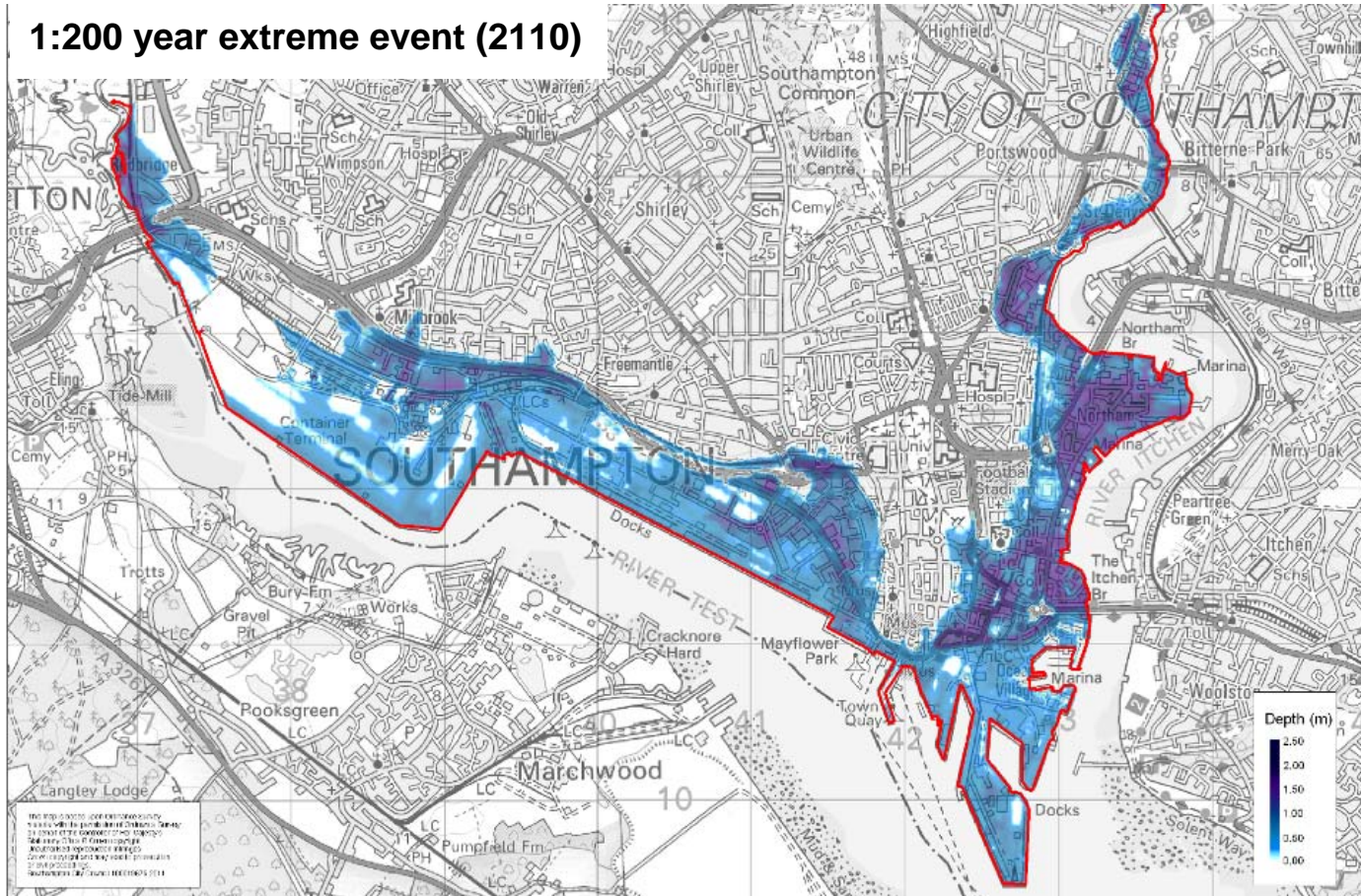


**Town Depot, 10<sup>th</sup> March 2008**

# The problem to be addressed



**1:200 year extreme event (2110)**





# The problem to be addressed



## Assets at risk

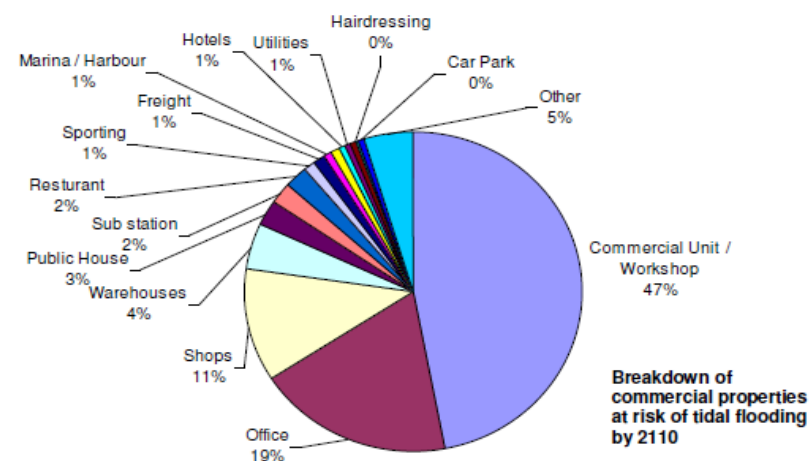
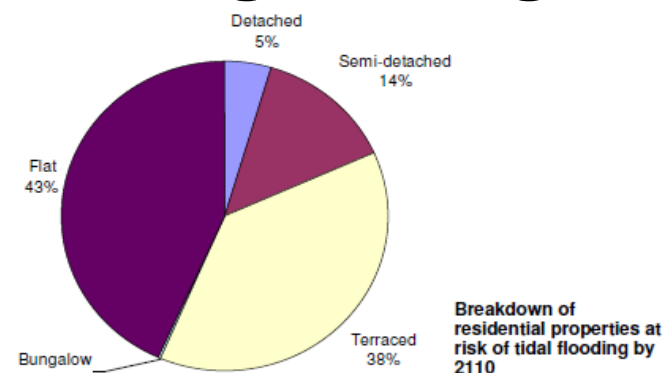
- 2733 residential properties (723 of which are within most deprived 20%)
- 1338 commercial properties
- Southampton Central Rail Station
- Mainline railways serving the city
- Two arterial roads into the City
- Two Wastewater Treatment Works (Portswood and Millbrook)
- St Mary's Football Stadium
- Port of Southampton and associated infrastructure
- Southampton Cruise terminals
- Isle of Wight Ferry terminals
- Historic Assets



# ‘Do Nothing’ damages

Estimated **£1.25 billion** residential and commercial property damages over the coming century under a ‘Do Nothing’ scenario.

Type	Number of properties at risk by 2110	Cash Damage
<b>Residential</b>	<b>2,733</b>	£ 522,314,000
<b>Commercial</b>	<b>1,338</b>	£ 735,140,000
<b>Total</b>	<b>4,071</b>	£ 1,257,454,000



# Aim of the Coastal Strategy

In recognition of the identified existing and potential future tidal flood risk (over the next 100 years) the overall objective is to:

*“Develop a Strategy that enables informed and robust strategic decisions to be made for the future sustainable management of flood and erosion risk in Southampton.”*



# Opportunities

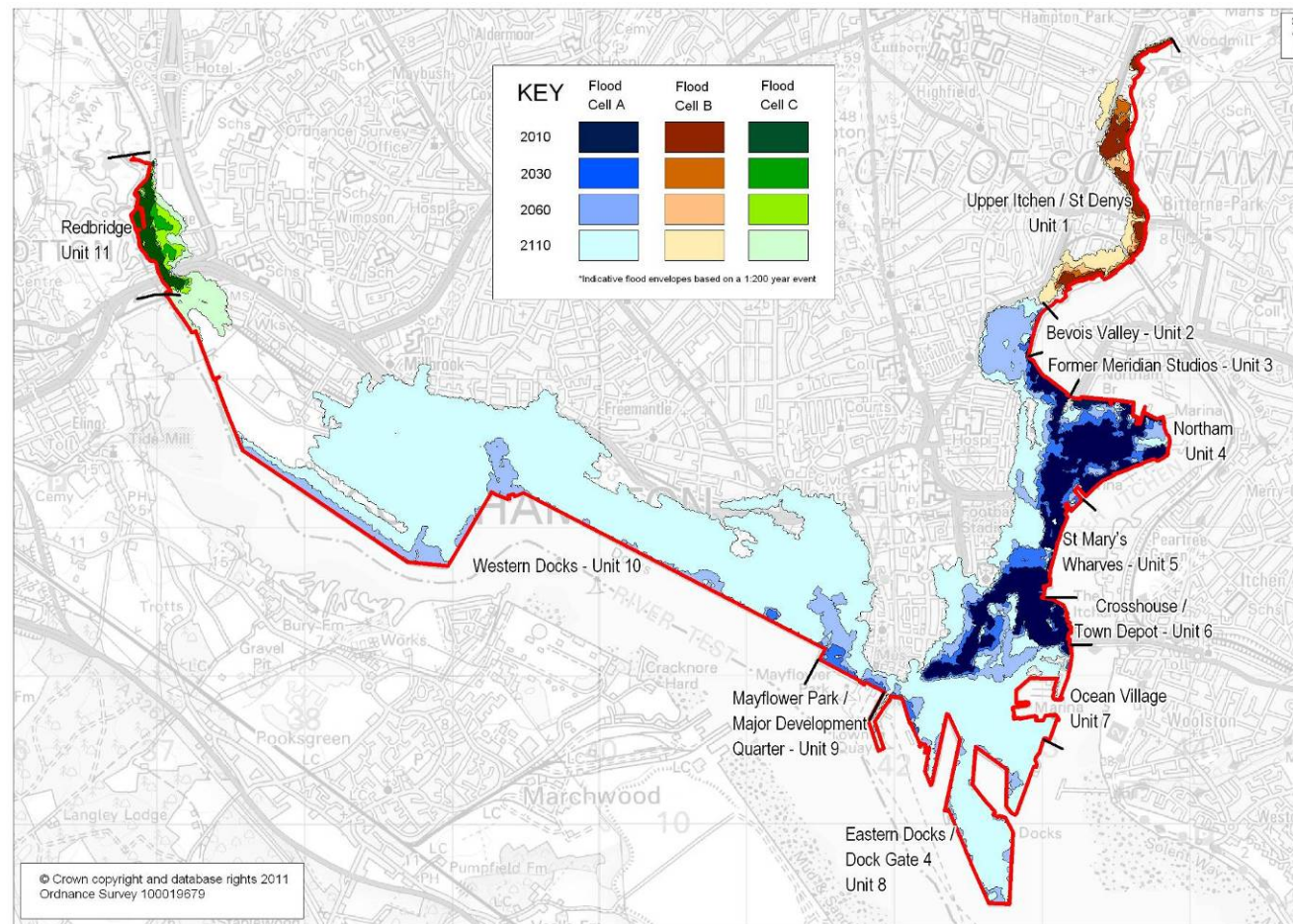
- Key redevelopment sites along the frontage
- Concurrent development of the Local Development Framework & associated documents
  - City Centre Master Plan;
  - City Centre Action Plan;
  - Southampton Development Plan
- Concurrent development of the Southampton Community Infrastructure Levy

# Constraints

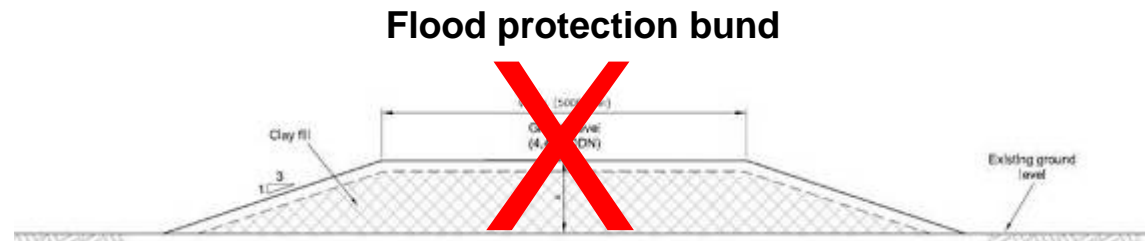
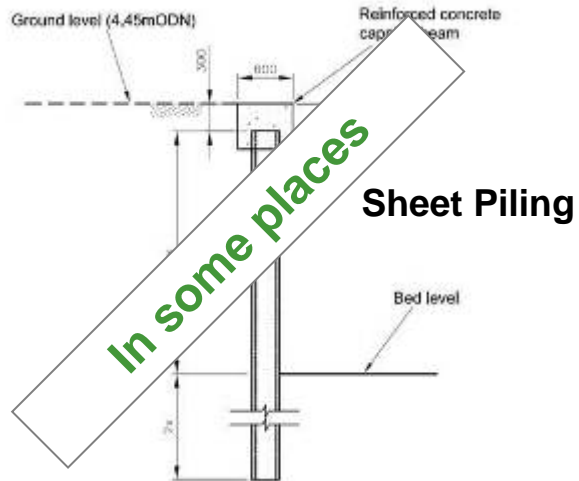
- Dense urban nature of the remainder of the frontage
- Lack of existing formal flood defences
- Multiple landowners
- Multiple land uses that vary extensively along the frontage, (ranges from private gardens and jetties, commercial, marine and port operations, essential infrastructure, open spaces and car parking facilities)
- Tide-locking of surface water sewer network



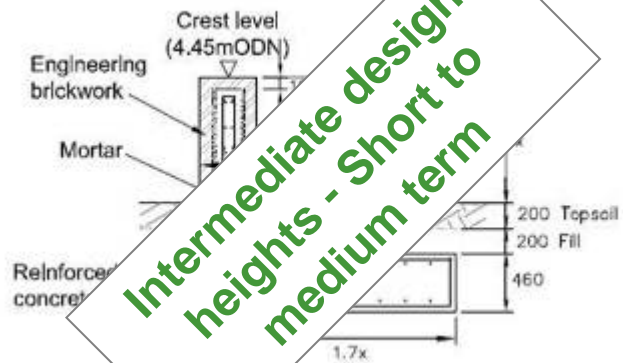
# Adaptive management



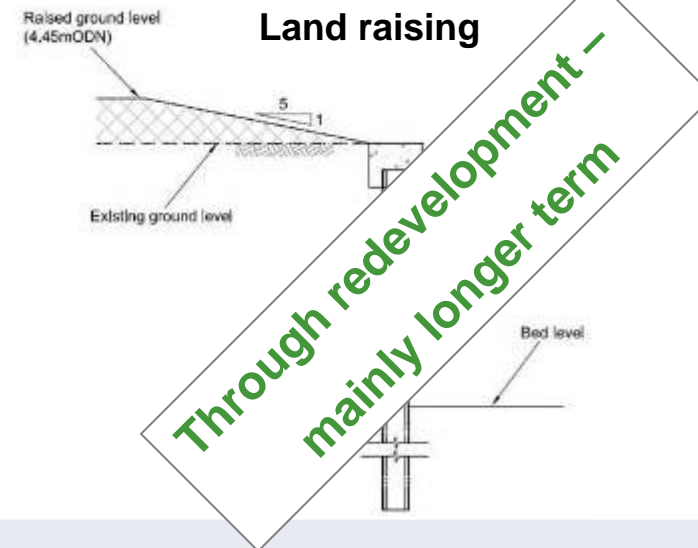
# The options explored



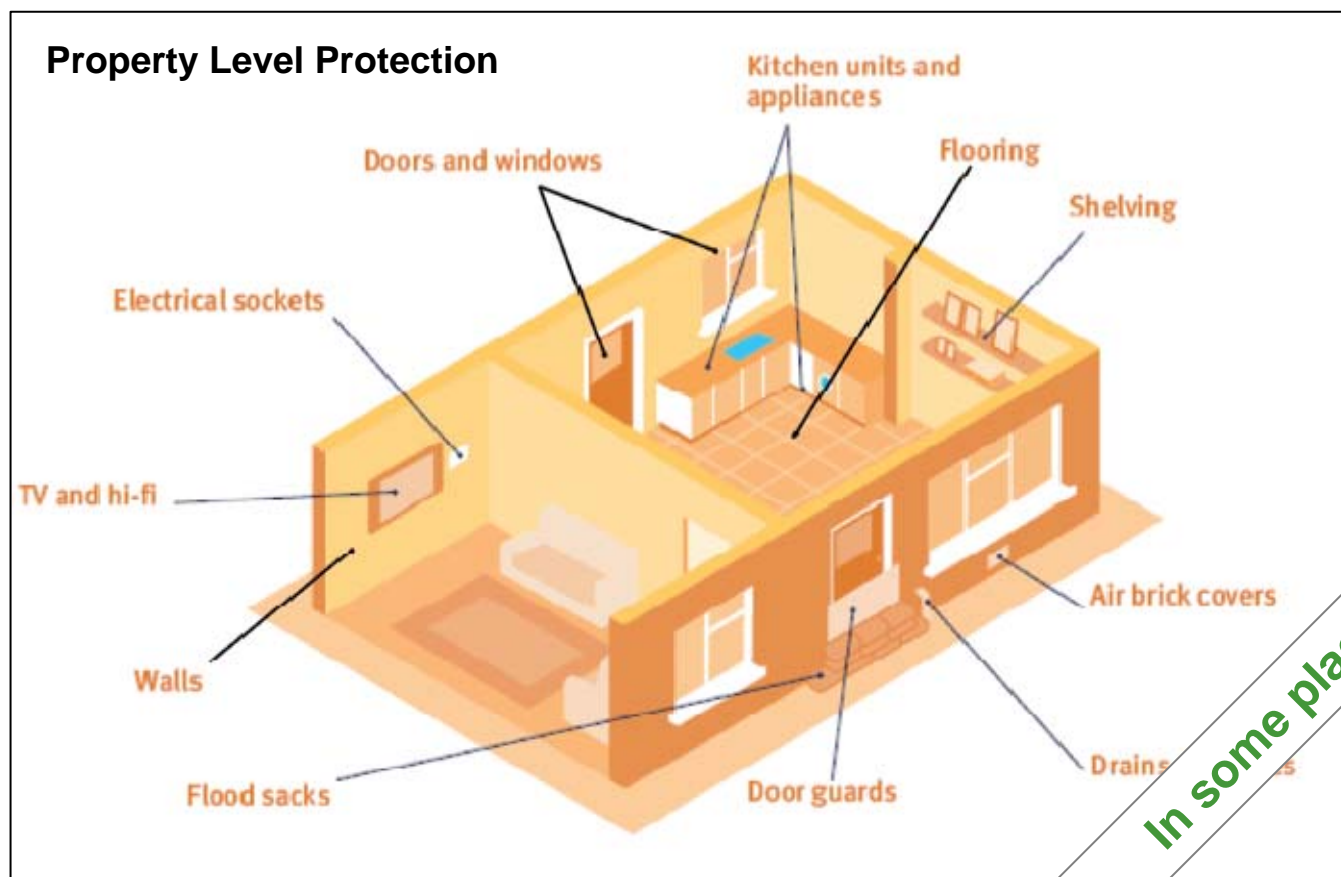
## Concrete flood walls



## Land raising

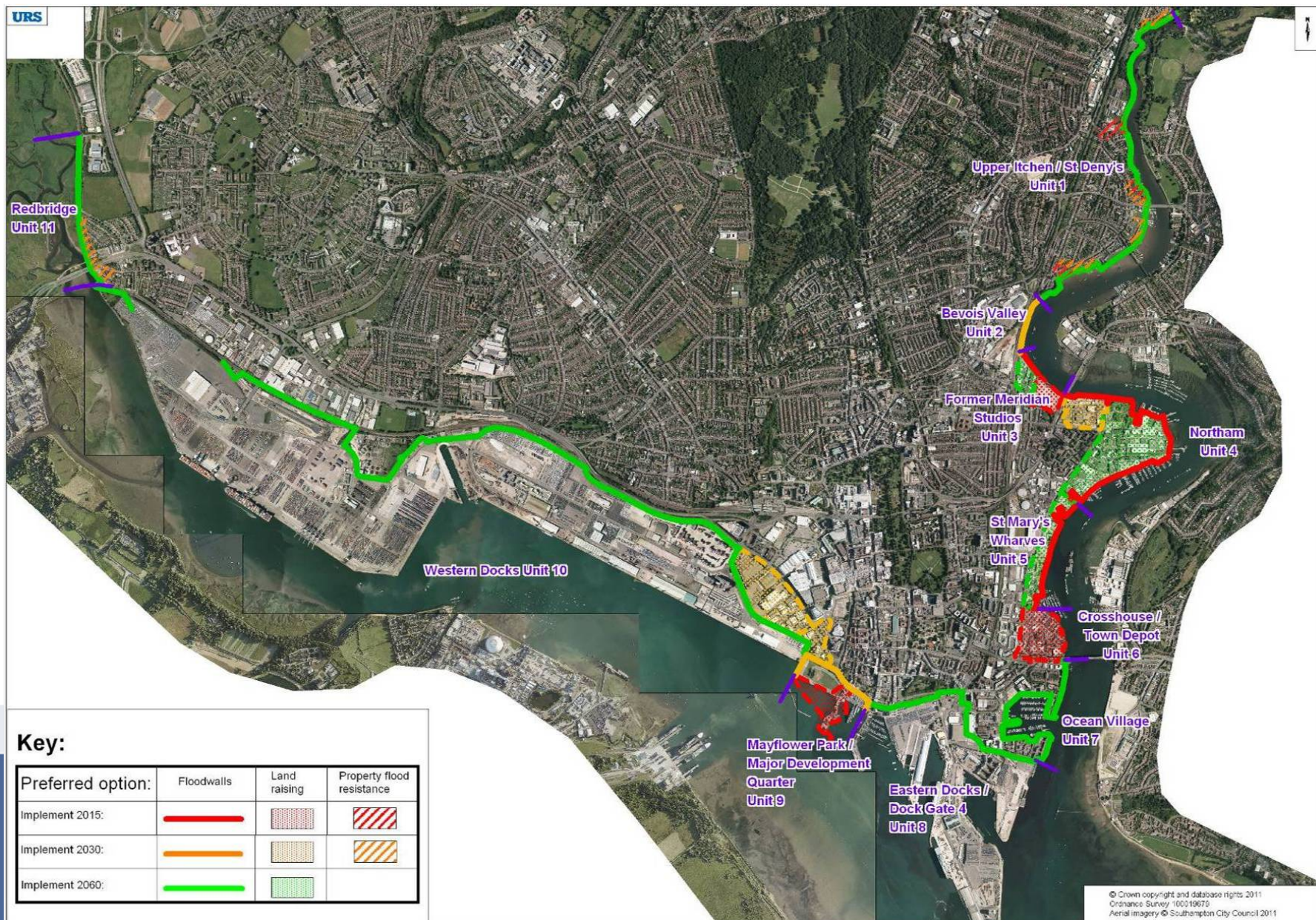


# The options explored





# Coastal Strategy options





# Environmental appraisal

WFD Assessment prepared

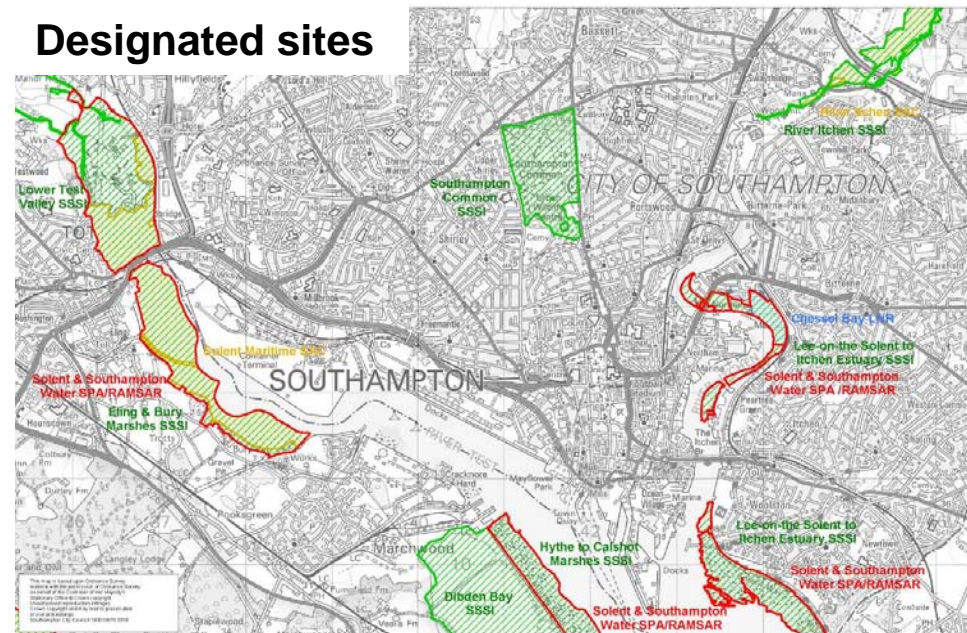
SEA prepared

- Potential for significant environmental benefits on Health, Material assets, Historic environment and Soil

HRA prepared

- Potential for coastal squeeze & intertidal habitat loss (accounted for within RHCP)
- Potential additional adverse impact on designated site at Redbridge after 2060

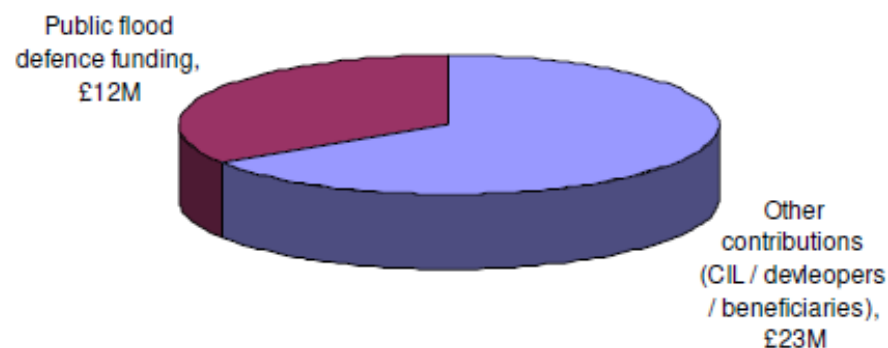
Designated sites



# What will it cost to implement the Strategy? (Cash cost)

Year	Cash cost (£ million)
2015	6.4
2030	10.1
2060	18.5
<b>Total Capital</b>	<b>35.0</b>
<b>Non-capital</b>	<b>4.5</b>
<b>TOTAL</b>	<b>39.5</b>

Estimated funding breakdown for The Strategy



Total cost of the damages if we 'Do Nothing'

**£1.25 billion**

Total cost of the damages with 'The Strategy':

**£106 million**

Damages avoided with 'The Strategy':

**£1.1 billion**





**Any  
questions?**

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