

**PURPOSE OF THIS UPDATE**

The purpose of this update is to inform the community of the status of projects within the City of Albany.

**Our Vision: 'Albany aims to be Western Australia's most sought after destination to live, work and visit.'**



**COMMUNITY UPDATE**

**NOVEMBER 2017**



**COASTAL HAZARD, RISK, MANAGEMENT + ADAPTATION PLAN (CHRMAP)**

A CHRMAP (Coastal Hazard, Risk, Management + Adaptation Plan) is a strategic planning document that informs the community and decision makers about the potential hazards, consequences, and actions needed to meet the challenges of coastal hazards including sea level rise.

The CHRMAP aims to ensure land in the coastal zone is continuously provided for coastal foreshore management, public access, recreation and conservation. A team of Coastal Specialists will be engaged to assist with this process and it is expected to take two years to complete.

**WHAT HAS BEEN DONE SO FAR?**

**Coastal Hazard Maps**

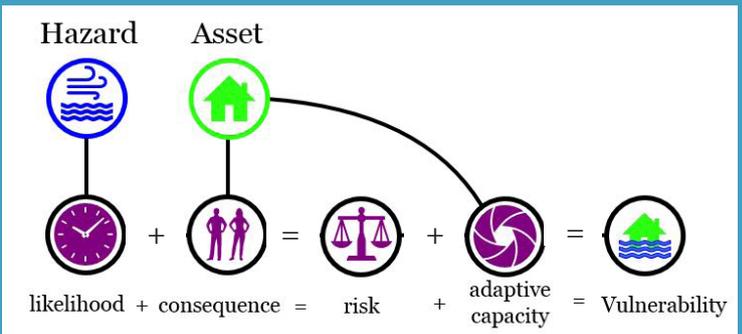
Coastal hazard maps have been produced for the project area. These maps show areas that are vulnerable to coastal hazards over various planning timeframes. They were produced by specialist consultants in accordance with State Planning Policy 2.6 and reviewed by State Government.

These maps are available at [www.albany.wa.gov.au](http://www.albany.wa.gov.au)



**Vulnerability Assessment**

Once the hazard maps were completed the assets within those lines were identified and their vulnerability assessed. This was done using several factors: What is the likelihood that the hazard will occur? What will be the consequence if the hazard occurs? What is the ability of the asset to adapt (adaptive capacity)?



**WHAT'S NEXT?**

The City will engage a team of Coastal Specialists to ensure the accurate capture of the community and stakeholder values, this will include the development of a Stakeholder and Community Engagement Plan.

These values will be incorporated into the existing work and an acceptable level of risk determined. The Coastal Specialists will then identify and evaluate Adaptation Options of each coastal asset identified to be vulnerable and develop short and long term implementation plans.

**HOW CAN I BE INVOLVED?**

Community and stakeholder engagement is a key component of the CHRMAP. As well as assessing the uses and values of the coast, community will be consulted on Adaptation Options and the draft CHRMAP.

**GOVERNANCE**

The project will be governed by a Steering Committee containing representatives from key Government Agencies and Community Groups. They will oversee every stage of the CHRMAP.

# What are the options for adapting to sea-level rise?

There are five types of options for adapting to sea-level rise:

In choosing your options you will need to consider:

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Low – high  
Potential cost to  
government and regulators



Short- to long-term  
Protection



## 1 Planning options

Scope objectives, strategies and policies

Taking account of risk and sensitivity to impact

Coastal hazard mapping

Mapping areas at risk of erosion and inundation, and mapping minimum floor height to avoid risk

Risk management

Cost-benefit analysis, vulnerability assessment, impact assessment

Emergency planning and preparedness

Prepare emergency plans for flooding, upgrade resources to match risk

## 2 Regulatory options

Regulation of land use

Zoning to regulate land use, establish minimum setback and building elevation etc.

Development permits

Requirements or regulation on specific developments to protect from hazard

Building regulation

Control design elements (e.g. materials)

## 3 Land use change or restriction options

Transfer of development potential

Land swap to allow development on low-risk land

Land acquisition

Purchase land at high risk and rezone

Land trusts

Manage land for conservation benefits, restrict development

Easements and covenants

Restrictions or conditions attached to land title

Foreshore tenure

Lease or license from crown so adjoining properties can develop integrated foreshore management

## 4 Structural options

Scour protection

Foundation protection for new or existing buildings

Structural elevation

Infill to raise land for building or habitable areas above flood risk

Sea walls, groynes etc

Hard shoreline structures to protect from flooding

Other hard protection

Storm-surge barrier, secondary protection e.g. raised roads

Flood proofing

Use building materials that can withstand short-term flooding, locate services (e.g. electricity) above flood level

## 5 Soft options

Dune building or rehabilitation

Creation or rehabilitation of dunes or offshore islands to buffer flood risk

Coastal wetland creation or restoration

Buffer to reduce wave energy

Beach nourishment

Addition of sediment to continually replenish loss from natural erosion

### You are also likely to need to combine options

For example, zoning of at-risk areas as unsuitable for development + a sea wall to protect high-value assets already in place