Coastal Planning Community Workshops Summary Report October 2017

Background

The City of Greater Geraldton is facing the adverse impacts of coastal erosion and inundation on its coastline. The impact of coastal hazards on our coastline is expected to increase due to the effects of sea level rise and climate change. The City of Greater Geraldton recently completed a suite of Coastal Inundation and Processes Allowances Studies for the coastal zone between Cape Burney and Drummond Cove, which indicate that portions of the coastline are at risk from inundation and erosion over a 100-year planning timeframe. The City has since adopted the State Planning Policy 2.6 – State Coastal Planning Policy (SPP2.6) sea level rise estimate of 0.9m over the 100 year planning timeframe. The three completed studies are available on the City's website at www.cgg.wa.gov.au and include:

- Cape Burney to Greys Beach Inundation and Coastal Processes Allowances Study;
- Point Moore Inundation and Coastal Processes Allowances Study; and
- Town Beach to Drummond Cove Inundation and Coastal Processes Allowances Study.

In accordance with SPP2.6, areas at risk of being affected by coastal hazards require a Coastal Hazard Risk Management and Adaptation Plan (CHRMAP).

Project Purpose

The purpose of CHRMAP is to utilize both the technical projections in the Coastal Inundation and Processes Allowances Studies and local knowledge to identify key assets and risks, and then use strategic planning, coastal engineering and economic modelling to identify adaptation pathways.

Engaging with the Community

The City and the Project consultant team developed and implemented a community and stakeholder engagement strategy in accordance with SPP2.6 requirements, which included the Coastal Planning Community Survey followed by two Coastal Planning Community Workshops. Extensive promotion of the project, the Community Survey and Community workshops was undertaken.

Community Coastal Planning Survey

The Survey was conducted from 2-23 October 2017 in which 376 responses were submitted. The aim of the survey was to:

- Identify coastal assets of community value (at risk from coastal erosion and inundation);
- Gain a better understanding of how the community values assets which are potentially at risk; and
- Gain an understanding of how the community rates the consequences of erosion and inundation on these assets.

Survey results will be available soon in a separate report.

Community Coastal Planning Workshops

Two Community Coastal Planning Workshops were held on Saturday 14 October 2017 in the Upper Hall of the QEII Seniors and Community Centre.

The objectives of the half-day long workshops were to:

1. Identify coastal assets of community value (at risk from coastal erosion and inundation);
2. Determine the coastal hazards scale of consequence for the identified assets;
3. Define risk tolerances for the identified coastal hazard risks; and

Provide feedback on proposed adaptation options that could address the risks.Workshop 1 focused on the coastal area from Cape Burney to Town Beach and Workshop 2, focused on the coastal area

from the Marina to Drummond Cove. In total 68 members of the community participated in the workshops.

Although the two workshops had different focus areas, both workshops utilised an identical process to achieve the workshop objectives. The workshops featured the following presentations and tasks.

Workshop Activity	Details
Presentation 1 Project Background	Presentation of project background information including the CHRMAP process, guidelines and coastal planning strategies hierarchy; overview of risk assessment; overview of study area; key findings of the three coastal processes studies; and asset classification categories.
Task 1 Coastal Asset Identification	Participants worked individually to identify assets at risk to inundation and erosion. Enlarged maps on tables featuring 2110 setback allowance lines and areas that would be inundated supported the process. Assets were classified (economic/physical, natural, social/cultural) and reasons why the asset is valued or important were recorded on sticky notes, which were placed in on enlarged maps near the actual location of the asset.
Presentation 2 Consequence Scale Overview	Presentation of detailed information on how to assess the consequences of erosion and inundation on previously identified assets using provided consequences table.
Task 2 Coastal Asset Consequence Scale	Participants worked together to determine the consequence of erosion and inundation on previously identified assets and recorded the results on each asset sticky note.
Task 3 Priority Assets	Participants prioritised their top assets by placing five black dots beside assets they valued most.
Presentation 3 Adaptation Strategies	Presentation of SPP 2.6 adaptation strategies hierarchy and mitigation options for each strategy including local examples.
Task 4 Priority Areas Adaptation Ideas	Participants developed adaptation strategies and preferred mitigation options for the priority assets on their map. Options to mitigate inundation of the CBD were also identified.

During the workshop process, participants identified 315 coastal assets, of which a number of the same assets were listed more than once. The following graphs provide an overview of the amount of times assets were mentioned and reasons why they are important to participants.

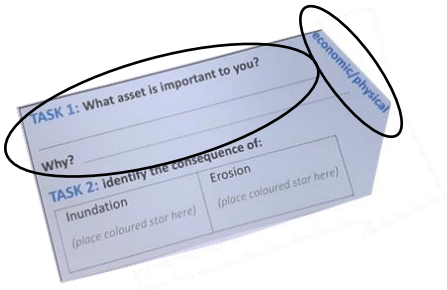


Image: Example of specially designed sticky note

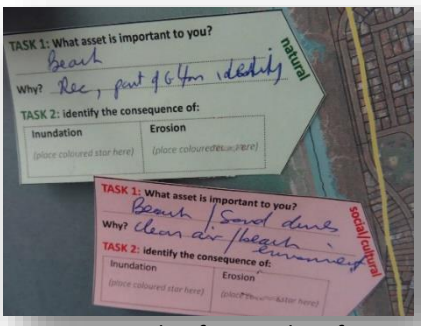
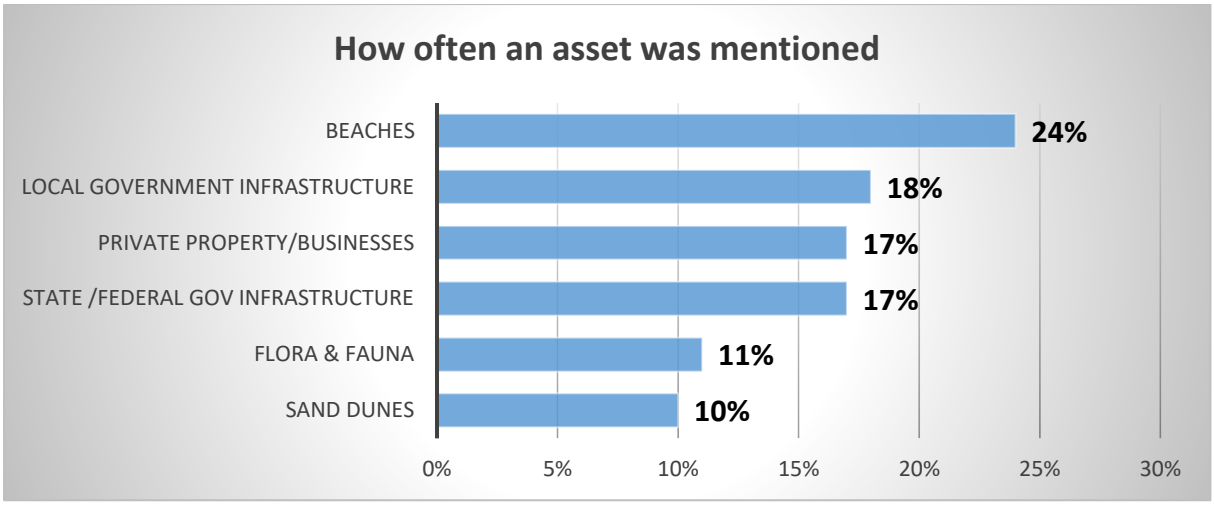
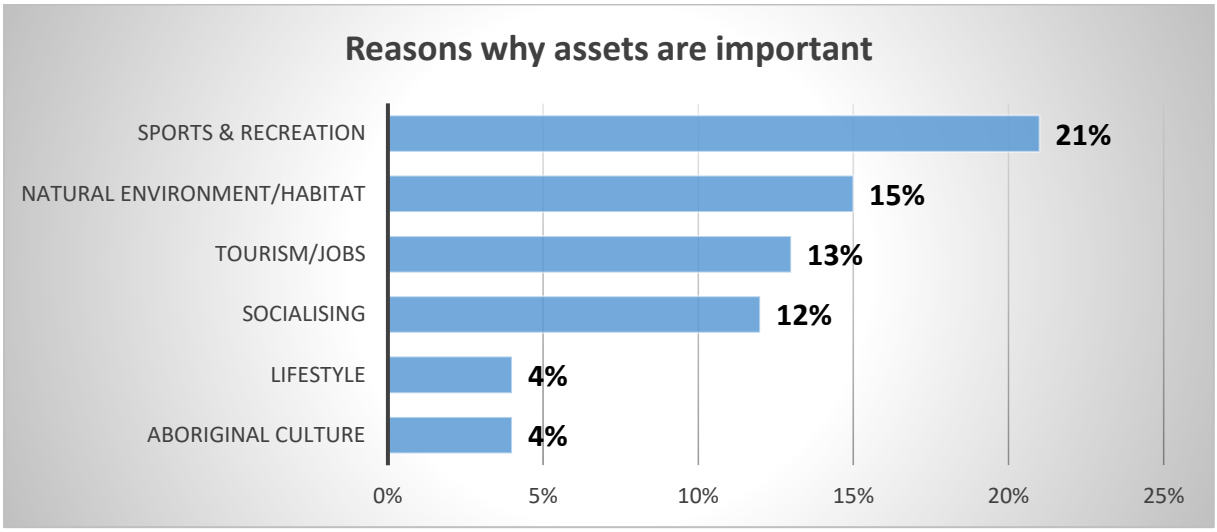


Image: Example of asset identification and its importance





An overview of participants' assessment of the consequence erosion and inundation would have on previously identified assets is provided in the table below.

Consequence	Impacted Assets
Catastrophic	Houses, properties, businesses, public infrastructure, utilities, beaches, Aboriginal heritage sites and historical buildings
Major	Community infrastructure, roads, carparks, boat ramps, public open spaces and caravan parks
Moderate	Cycle/foot paths, sand dunes and trees
Minor	Reefs, breakwaters, fauna, flora and beach eco systems
Insignificant	Jetties, surf breaks, the Foreshore, parks and dune vegetation

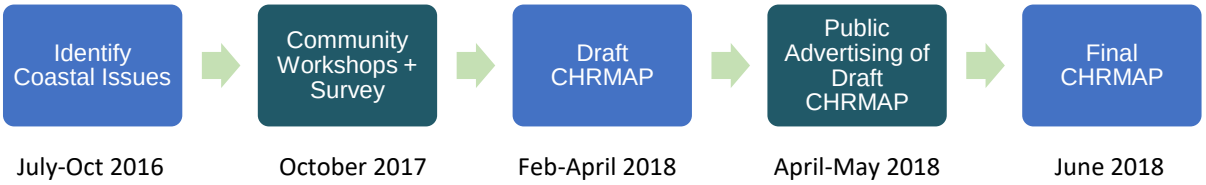
The final presentation of the workshop reviewed the SPP 2.6 coastal planning adaptation strategies hierarchy (avoid, planned/managed retreat, accommodate, protect) presented and mitigation options, some of which have already been locally implemented. Participants then choose an

adaptation strategy for the top priority asset on their map and identified potential mitigation options or ideas for the asset(s). The following table provides and overview of the adaptation strategies and mitigation ideas participants developed during the workshop.

Assets	Adaptation Strategies	Adaptation Ideas
Drummond Cove Foreshore	Accommodate/protect	Sand nourishment, groynes, Geotextile containers, off shore submerges wall.
	Managed retreat/accommodate	Artificial reefs, beach nourishment, revegetation.
Whitehill Road	Managed retreat/protect	Dune rehabilitation, living shoreline, boat ramp.
Drummond Cove houses/infrastructure	Protect	Buried rock wall, breakwater, artificial reef, groyne, wooden pilings.
John Batten Hall	Managed retreat/ protect	Move hall, floating building, hard engineering- boat ramp or small marina.
Sunset Beach	Protect	Artificial reef.
Sunset Beach houses	Protect	Seawall, artificial reef, sand nourishment, dune rehabilitation, Geotextile containers, managed access.
St Georges Beach	Protect	Buried sea wall.
Midalias Beach	Accommodate/protect	Sand nourishment, 'pebbalise' beach using recycled glass
CBD	Accommodate	Install flood barriers, pump systems, move essential infrastructure to 2nd storey
Point Moore	Managed retreat/ accommodate/ protect	Artificial reef, enlarge sand dunes, reconstruct houses on stilts, bunds on tracks.
Greys Beach	Protect	Rock/concrete walls.
Green River mouth coastal dunes	Avoid	Sand trapping, revegetation, maintain Southgate dunes.

CHRMAP Process

At the end of the workshops, the CHRMAP Process was reviewed. With the conclusion of the Community workshops and survey, the first stage of community engagement needed to inform the development of the CHRMAP has been completed. The following diagram outlines the City's CHRMAP process.



Full Report

The full Community Coastal Planning Workshops report is available on the City website www.cgg.wa.go.au