



Department of **Transport**  
Department of **Planning, Lands and Heritage**



# **CoastWA** 2023-24 Achievements





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Published by the  
Western Australian Planning Commission

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Published September 2024

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# CoastWA

CoastWA supports planning for, managing and protecting the Western Australian coast from the impacts of coastal hazards to ensure long-term sustainable land use and development on the coast.

With a State Government investment of \$33.5 million over five years (2021 – 2026) CoastWA:

- supports coastal managers to evaluate options for coastal management and adaptation strategies;
- provides the means to plan, budget and manage the impacts of coastal hazards; and
- strengthens the State and local government partnership and ensures expertise is available, especially for smaller local governments with limited resources.

On behalf of the Western Australian Planning Commission, the Department of Planning, Lands and Heritage (DPLH) collaborates with Department of Transport (DoT) to deliver the CoastWA Program, which is overseen by the interagency Coastal Management Advisory Group.

Activities and achievements for CoastWA are reported on an annual basis and this report covers the third year of the program (2023-24).

## CoastWA comprises six elements





# Summary of key achievements in 2023-24

## Coastal grants

CoastWA grants activity	CMPAP	Coastwest	CAP	H-CAP	Total
Projects initiated in 2023-24 (funding awarded)	5 \$500,000	13 \$431,954	17 \$932,941	2 \$1,915,058	<b>37</b> <b>\$3,779,953</b>
Total projects monitored in 2023-24	24	35	26	4	<b>89</b>
Projects completed in 2023-24	7	19	19	2	<b>47</b>
Payments made 2023-24	\$553,768	\$512,926	\$693,807	\$2,727,139	<b>\$4,487,640</b>
Active projects as at 1 July 2024	17	16	7	2	<b>42</b>
New 2024-25 projects approved (funding awarded)	5 \$350,000	14 \$472,897	12 \$900,000	1 \$1,660,000	<b>32</b> <b>\$3,382,897</b>

- ✓ Seven **CMPAP** funded projects were completed including three local government Coastal Hazard Risk Management and Adaptation Plans (CHRMAP). The plans provide a framework for planning and managing the impacts of erosion and inundation. This included the City of Stirling, as well as the Shire of Murray and the Town of East Fremantle, which are the State's first two local government CHRMAPs completed in estuarine environments.
- ✓ 19 **Coastwest** funded projects were completed including marine monitoring in Albany, dune restoration across Perth and Port Hedland, erosion management in Geraldton, and foreshore planning in Broome.
- ✓ 19 **CAP** funded projects were completed. This includes the extension of existing sand nourishment programs at Yanchep and Quinns Beach; identification of alternative offshore sand

sources by the City of Wanneroo; ongoing sand bypassing project by the Shire of Esperance; and the design and construction of a beach access ramp by the City of Stirling.

- ✓ Two **H-CAP** projects were completed at coastal erosion hotspots in Port Beach (Fremantle) and Sunset Beach (Geraldton). These major projects provide beach stabilisation through the creation of dunes at Port Beach and Geosynthetic Sand Containers (GSC) groynes at Sunset Beach, in combination with sand nourishment at both sites.
- ✓ The total value of the 47 projects completed in 2023-24 is \$6,595,057. This includes \$2,796,369 in grant funding and \$3,798,688 in project partner contributions. This outcome represents the concerted efforts of 22 local governments and their communities, including 34 project partners.



## Ground-truthing, monitoring and inundation assessment

### Ground-truthing

- ✓ Stage One – Geotechnical site surveys completed at 12 sites at risk of coastal erosion and inundation.
- ✓ Stage Two – Surveys at an additional five sites are underway.
- ✓ Procurement for an additional seven sites commenced.

### Coastal Monitoring Program

- ✓ Training of coastal Aboriginal rangers to deliver qualified drone operators to undertake beach monitoring commenced.
- ✓ Nine local government authorities working together with Aboriginal Corporations to deliver ongoing and innovative beach monitoring.

### Coastal inundation assessment

- ✓ A comprehensive state-wide coastal inundation assessment was completed.
- ✓ Site summaries for 23 identified at-risk coastal communities identified three as being at high risk of inundation within the next 25 years.

## Studies and reviews

### Basic raw materials study

- ✓ The state-wide assessment of the supply and demand of sand and armour rock used for coastal protection works commenced.

### Metocean data collection

- ✓ Two offshore wave buoys at Geraldton and Bremer Bay continue to provide near real time data transmission for wave height, period and direction. Data collected is available on the DoT website.

### Creation of coastal monitoring specifications and scopes

- ✓ Development of a 10-year Coastal Management Action plan including sample scopes and specifications for coastal (onshore) data collection/monitoring has commenced.

## Hazard mapping and data acquisition

### Individual hotspot management histories

- ✓ Commenced a review of coastal management histories and performance at 12 coastal erosion hotspots.
- ✓ Project methodology developed with the use of Quinns Beach (Wanneroo) as a pilot site.
- ✓ Hotspot site summaries have been prepared for Quinns Beach and Grannies Beach (Irwin). Site summaries have been drafted for Seabird and Grace Darling Park (Gingin), C.Y. O'Connor (Cockburn).

### Bathymetric Light Detection and Ranging (LiDAR)

- ✓ Stage One to collect high-resolution LiDAR of the coastal and nearshore waters on the Southern and Gascoyne coast commenced.

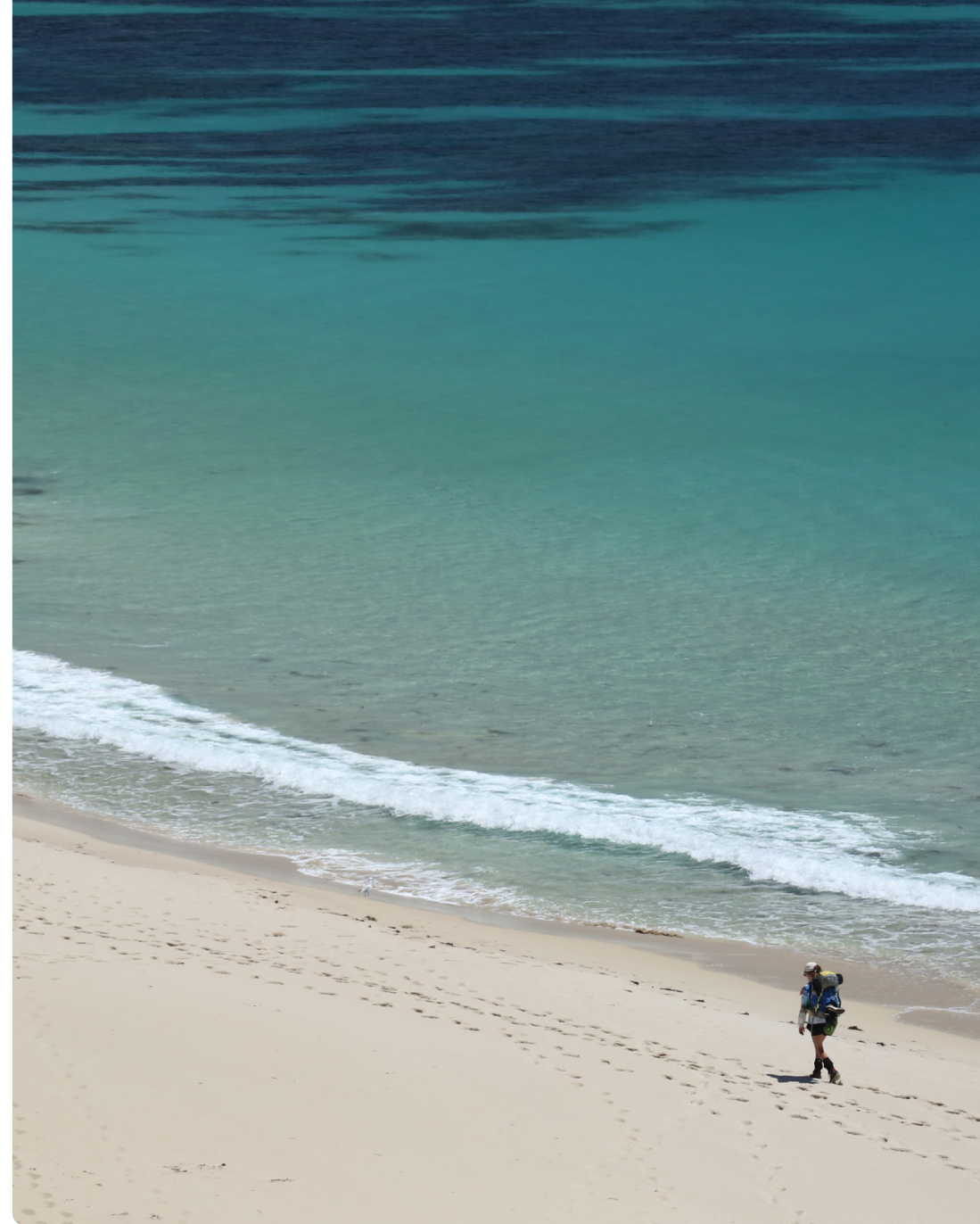


## Community engagement, training and education

- ✓ The coastal values project has progressed with community focus groups conducted. Survey preparation has been undertaken for case studies in Broome, Mandurah, Stirling, Cambridge, Cockburn and Rockingham.
- ✓ The CoastWA Training Series delivered six modules through in-person and online sessions, with 445 attendees. Recorded sessions, fact sheets and PowerPoint slides are available on the DPLH website.
- ✓ DoT and DPLH continue to provide expert advice and technical assistance to coastal land managers, stakeholders and community through funded projects and on an as needs basis.

## Staff and program management

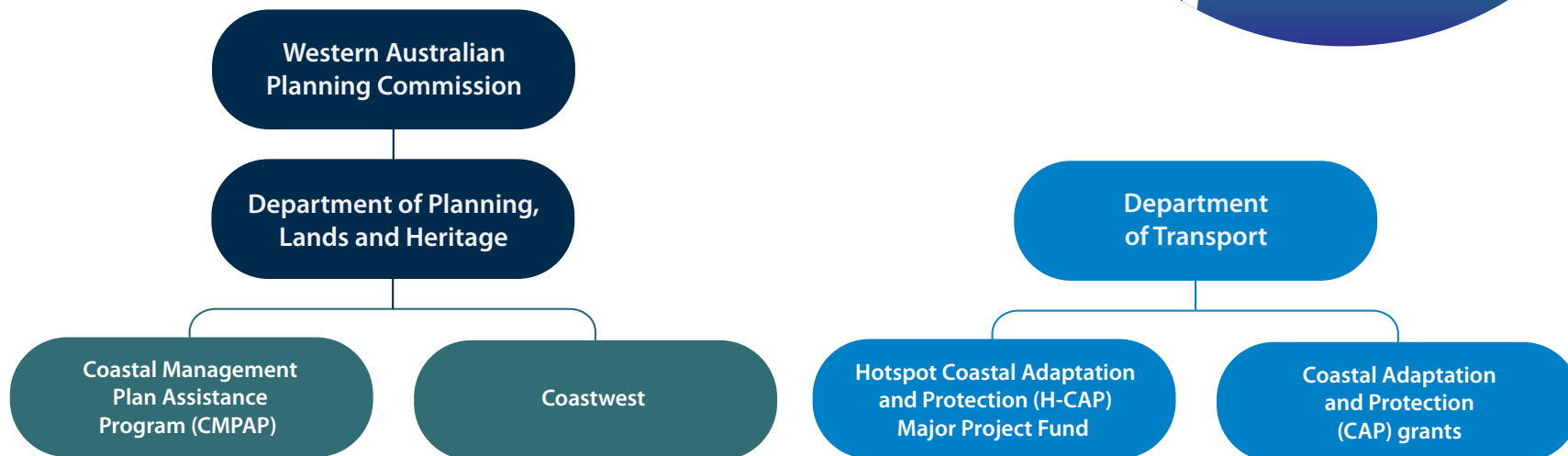
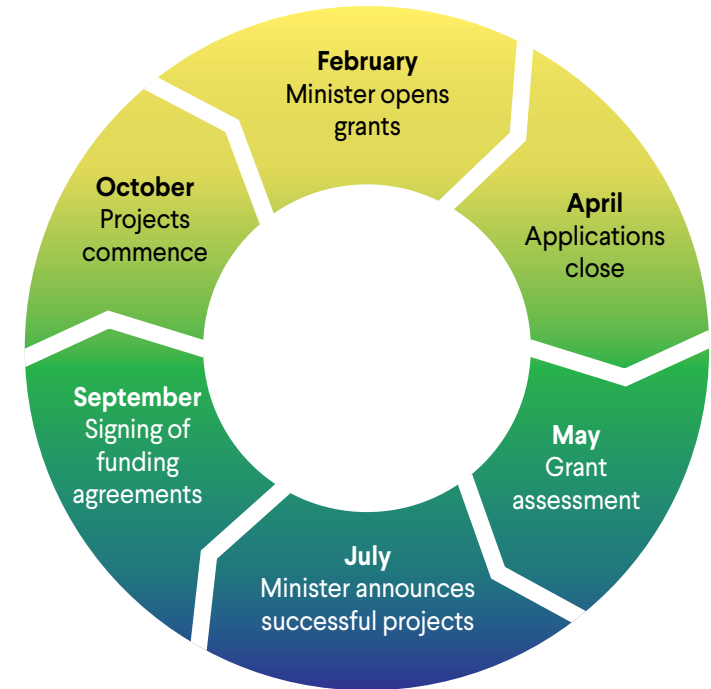
- ✓ Four meetings of the interagency Coastal Management Advisory Group were held.
- ✓ The report of the Coastal Hazards Working Group, *Towards a National Collaborative Approach to Managing Coastal Hazards in Australia*, was considered by the national Energy and Climate Change Ministerial Council.
- ✓ A state-wide economic assessment of the impact of coastal hazards has commenced. To inform this project, 52 coastal and estuarine local governments were individually consulted.
- ✓ Collaborated with the Department of Fire and Emergency Services to encourage coastal planners and managers of coastal projects to apply for funding through the Australian Government's Disaster Ready Fund, with 12 applications submitted.





# A. COASTAL GRANTS

Coastal grants are a major element of the CoastWA program representing some 50% of its budget. The grants support local coastal managers and community groups to proactively plan and manage their coastal reserves. Run annually, the opening of grant applications is announced jointly by the Ministers for Planning and Transport, generally in February and closing in April for funding in the following financial year.





## 1. Coastal Management Plan Assistance Program (CMPAP grants)

CMPAP supports *State Planning Policy 2.6: State Coastal Planning Policy* (SPP2.6) and its implementation. Grants are provided to support coastal land managers to prepare and implement strategies and management plans for coastal areas that are, or predicted to become, under pressure from a range of challenges including climate change and coastal hazards. CMPAP grants are administered by DPLH on behalf of the WAPC.

In 2023-24:

- Five projects were initiated totalling \$500,000 in CMPAP funding, leveraging \$577,500 in partner contributions (total project value of \$1,077,500).
- 24 projects (including 19 projects from previous years), across 23 local governments, were administered and monitored and had project Steering Committee involvement from DPLH staff and in some instances DoT staff.
- Seven projects were completed, supported by \$362,484 in CMPAP funds and \$499,747 of cash and in-kind contributions from coastal managers (see Attachment 1). This included:
  1. Shire of Murray CHRMAP
  2. City of Greater Geraldton Coastal Node Master Planning
  3. City of Stirling CHRMAP
  4. Jurien Bay Central Foreshore Adaptation Investigation
  5. Town of East Fremantle CHRMAP
  6. Cockburn Coastal Protection Benefit Distribution Analysis
  7. Review of Shire of Denmark Coastal Reserves Management Plan
- \$553,768 in grant payments were made.

In preparation for 2024-25:

- Applications were open from 8 February to 17 April 2024.
- Six applications were received requesting \$427,000 in CMPAP funding.
- Five projects were approved to commence in 2024-25, supported by \$350,000 in CMPAP funding and leveraging \$357,000 in partner contributions (total project value of \$707,000).



City of Stirling CHRMAP community consultation. Photo by City of Stirling



Planting at Floreat dunes. Photo by Cambridge Coastcare

## 2. Coastwest

Coastwest grants support coastal land managers and community organisations to undertake projects to rehabilitate, restore and enhance coastal sites around the State's coastline. Coastwest grants are administered by DPLH on behalf of the WAPC.

In 2023-24:

- 13 grants were initiated totalling \$431,954 in Coastwest funding, leveraging \$1,249,145 in partner contributions (total project value of \$1,681,099).
- 35 projects (including 22 projects from previous years) were monitored.

- 19 projects were completed, supported by \$520,814 in Coastwest funds and \$1,609,393 of cash and in-kind contributions from project partners.
- \$512,926 in grant payments were made.

Completed activities included:

- 19 projects (see Attachment 2) including:
  - One local area or site planning project
  - One monitoring project
  - Four capacity building projects
  - 13 on-ground projects
- \$3.10 in project partner contributions leveraged for every Coastwest dollar.



- 30 community groups, educational institutions, natural resource management organisations and other not-for-profit organisations participated in projects along with 11 coastal local governments and two State Government agencies.
- 37,507 seedlings planted.
- 537,276 square metres of weeding carried out.
- 3,057 metres of fencing installed or repaired to protect vegetation and sensitive areas.
- 17,421 square metres of dunes protected by brushing and erosion control.
- 7,074 volunteers.
- Volunteer contributions of 25,329 hours (valued at \$30 per hour) and cash contributions valued at \$810,441, plus \$284,160 in other contributions.
- 179 days of workshops, training and information sessions.
- 100 days of environmental monitoring.

In preparation for 2024-25:

- Applications were open from 8 February to 17 April 2024.
- 21 applications were received requesting \$622,947 in Coastwest funding.
- 14 grants were approved to commence in 2024-25, supported by \$472,897 Coastwest funds and leveraging \$1,412,547 in partner contributions (total project value of \$1,885,444).



Track closures at Tjaltjraak Boodja Park.  
Photo by Shire of Esperance

Laying brush at Leighton Beach.  
Photo by Perth NRM



### 3. Coastal Adaptation and Protection (CAP) grants

CAP grants are administered by DoT to provide financial assistance for local projects that identify and manage coastal hazards. DoT also provide non-financial assistance, project administration and oversight such as engineering and technical guidance and advice, project scoping and provision of coastal data.

In 2023-24:

- 17 projects were initiated, supported by a total of \$932,941 in grant funding and leveraging \$1,079,903 in partner contributions (total project value of \$2,012,844).
- 26 projects across 16 local governments were managed including nine projects from previous years.
- 19 projects were completed (see Attachment 3), comprising:
  - Eight monitoring projects – e.g. at Broome townsite, Cottesloe, South Fremantle and Geraldton's erosion hotspots.
  - Two investigation projects – e.g. identifying alternative offshore sand sources by the City of Wanneroo and coastal protection options study by the City of Mandurah.
  - Four adaptation projects – e.g. the extension of existing sand nourishment programs at Yanchep and Quinns Beach; and detailed design studies upgrading a coastal seawall in Mandurah.
  - Three adaptation/asset management projects – e.g. an ongoing sand bypassing project by the Shire of Esperance and the detailed design and construction of a beach access ramp by the City of Stirling.
- \$823,560 in grant payments were made.
- \$242,368 in CAP funding was carried over to allow for extension of six projects to 2024-25.

In preparation for 2024-25:

- Applications were open from 8 February to 17 April 2024.
- 30 applications were received requesting \$2,644,312 in CAP funding.
- 12 projects approved to commence in 2024-25, supported by \$900,000 CAP funding and leveraging \$1,594,841 in partner contributions (total project value of \$2,494,841).



Beach access ramp at Mettams Pool. Photo by City of Stirling



## 4. Hotspot Coastal Adaptation and Protection (H-CAP) Major Project Fund

H-CAP provides financial assistance for strategic coastal adaptation projects at Western Australia's 55 coastal erosion hotspots. H-CAP is administered by DoT on behalf of the WAPC, to assist with design and implementation of coastal adaptation works.

In 2023-24:

- Two adaptation projects were initiated in Geraldton and Denmark, supported by \$2,002,678 in grant funding:
  - City of Greater Geraldton was initially awarded \$615,000, then provided with an additional \$87,620 for the Sunset Beach Stabilisation which included three, 70 metre Geosynthetic Sand Container (GSC) groynes and 8,000 cubic metres of sand nourishment (Stage 2). Partner contributions worth \$663,063 (total project value of \$1,365,683).
  - Shire of Denmark was initially awarded \$1,140,000, then provided with an additional \$160,058 for Ocean Beach coastal adaptation which included the relocation of the boat shed and replacement of the Surf Life Saving Club retaining wall. Partner contributions worth \$650,000 (total project value of \$1,950,058). This project has been extended to September 2024 to accommodate revegetation works and pile capping.
- The Shire of Esperance's project that commenced in 2022-23 is still underway:
  - Shire of Esperance was initially awarded \$750,000 in 2022-23, then was provided with an additional \$200,000, for a two-year project to construct the Castletown Beach sand back-passing pipeline. Partner contributions worth \$509,196 (total project value of \$1,459,196). This project is expected to be completed in winter 2024, with electrification of booster pumps and connection to the network.



Coastal adaptation works at Ocean Beach. Photo by Shire of Denmark

- Two projects were completed (see Attachment 4) with \$1,044,255 in payments made:
  - City of Fremantle's Port Beach sand nourishment phase 2 dune creation and stabilisation was initially awarded \$585,090 in 2022-23 (City of Fremantle contributed \$75,000, with total budget of \$660,090). Final cost was \$416,635 including CoastWA saving of \$243,455 which was reallocated to other H-CAP projects.

- City of Greater Geraldton's Sunset Beach stabilisation through groyne and nourishment (Stage 2) was initially awarded \$615,000 from H-CAP 2023-24, and an additional \$87,620 provided (total H-CAP grant value \$702,620). The City's contribution was \$663,063 and therefore the total project cost was \$1,365,683.

In preparation for 2024-25:

- Invitations were sent to local managers promoting the opening of grant applications from 8 February to 17 April 2024.
- One application was received from the Shire of Broome requesting \$1,660,000 in H-CAP funding. The project is part of a wider redevelopment of the Cable Beach Foreshore estimated to cost \$60 million. The project has three primary components including the construction of:
  - A rubble mound seawall of approximately 105 metres in length.
  - An access ramp within the structure of the seawall to allow for vehicle (and camel) access to the foreshore.
  - Drainage infrastructure with outfalls located at the northern end of the seawall.
- Approval of the one project to commence in 2024-25, supported by \$1,660,000 H-CAP funding and leveraging \$1,472,822 in partner contributions (total project value of \$3,132,822).



Stage 2 of the Sunset Beach stabilisation project using Geosynthetic Sand Containers (GSC) and sand nourishment. Photos by DoT.



## B. GROUND-TRUTHING, MONITORING AND INUNDATION HOTSPOTS ASSESSMENT

This component of the CoastWA Program is led by DoT.

### 1. Ground-truthing

There have been two stages of geotechnical site surveys undertaken in 2023-24. Surveys produce detailed maps of the extent, elevation and strength of the underlying bedrock. The presence and characterisation of rock is an important factor in determining the exposure of an area to coastal erosion.

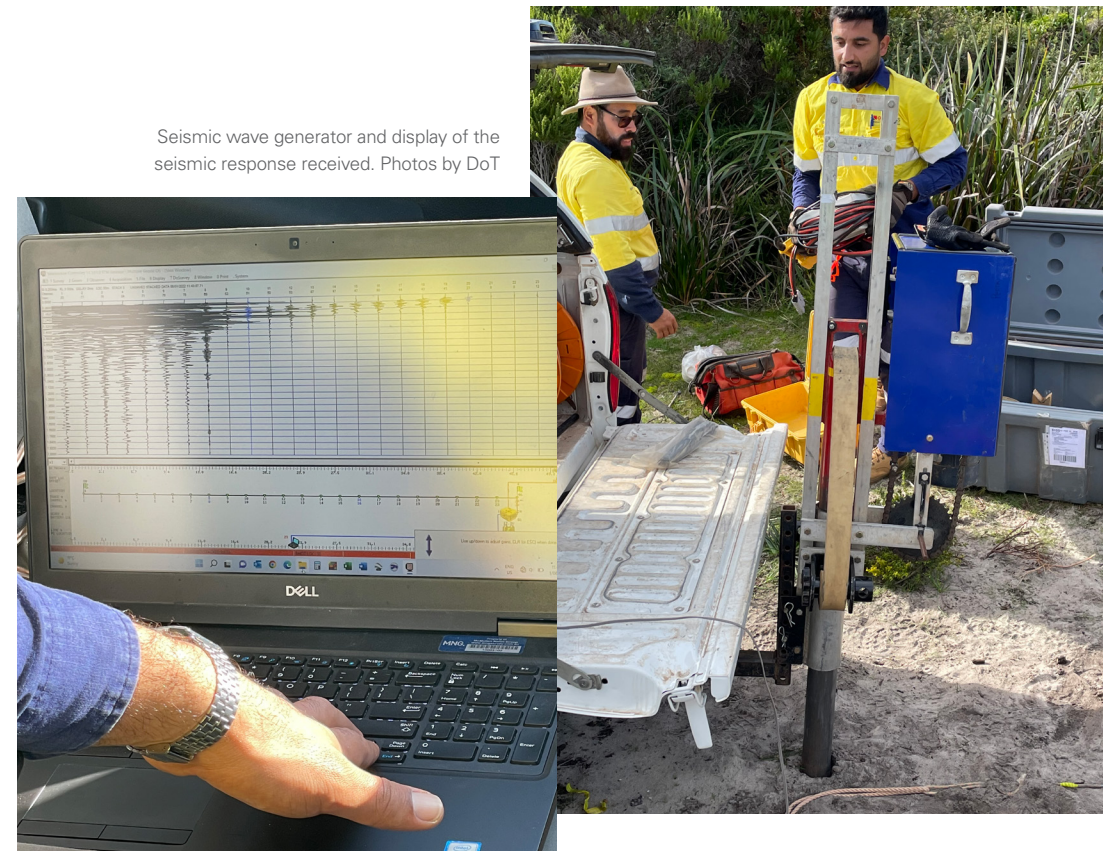
Stage One was completed in July 2023. It involved 12 coastal sites threatened by erosion and inundation:

1. Hopetoun, Shire of Ravensthorpe
2. Peaceful Bay, Shire of Denmark
3. Parry Beach, Shire of Denmark
4. Dalyellup, Shire of Capel
5. Peppermint Grove, Shire of Capel
6. Doddi's Beach, City of Mandurah
7. Falcon Bay, City of Mandurah
8. Seabird, Shire of Gingin
9. Ledge Point, Shire of Gingin
10. Lancelin, Shire of Gingin
11. Cervantes, Shire of Dandaragan
12. Horrocks, Shire of Northampton.

Stage Two commenced in October 2023 and involved three survey sites:

1. Denham, Shire of Shark Bay
2. Exmouth, Shire of Exmouth
3. Onslow, Shire of Ashburton

Stage Two surveys are expected to be completed in July 2024. Procurement for an additional seven coastal site surveys is underway and are these are expected to be completed in 2024-25.



Seismic wave generator and display of the seismic response received. Photos by DoT

## 2. Coastal monitoring program

A project to undertake beach monitoring using unmanned aerial vehicle (UAV) drones commenced in January 2024. The project is co-funded by CoastWA and the Australian Government's Disaster Ready Fund.

A key goal of the project is to build capability by training Aboriginal rangers to be Civil Aviation Safety Authority (CASA) certified remote pilots and survey technicians with the long-term goal of the rangers undertaking project management duties. The monitoring program will deliver high-resolution imagery and digital elevation data at ten coastal erosion hotspots along 200 kilometres of coastline between Rockingham and Busselton. It will also capture coastal changes in both vegetation, type and density, and topography at intra-annual and inter-annual timescales.

A key project input is the collaboration between nine local government authorities with Aboriginal Corporations to deliver ongoing and innovative beach monitoring, the first of its kind in Western Australia. In addition, the project has further developed collaboration between Main Roads WA and DoT by utilising Main Roads' established drone capture program and access to its Remote Chief Pilot, a requirement to operate under CASA regulations.

The project is a partnership between DoT and the Peron Naturaliste Partnership. It is expected to be completed in April 2025.



Aboriginal rangers shown how the drone lands remotely.  
Photo by Peron Naturaliste Partnership



### 3. Coastal inundation identification and assessment

The state-wide assessment evaluated the potential scale and extent of coastal inundation hazard over the next 25 years. Findings and recommendations will assist in developing a strategic approach to the threat and mitigation challenges presented by inundation. The study defines inundation as the adverse impacts of high ocean water levels on assets or values that are usually outside the influence of the sea.

The study recognised that inundation hazard is expected to increase over time, with projected sea level rise requiring future adaptation (Figure 1). Following initial screening of coastal communities within WA, 23 sites were identified for detailed evaluation (Figure 2).

**Figure 1: Summary of asset exposure to inundation high, extreme and extreme +0.9m water level. High inundation:** corresponds approximately to a 25-year ARI water level. **Extreme inundation:** corresponds approximately to a 100-year Annual Recurrence Interval (ARI) water level. **Extreme +0.9m inundation:** is shown to demonstrate relative sensitivity of inundation to other contributing factors, including uncertainty about inundation levels, wave components, or mean sea level change.

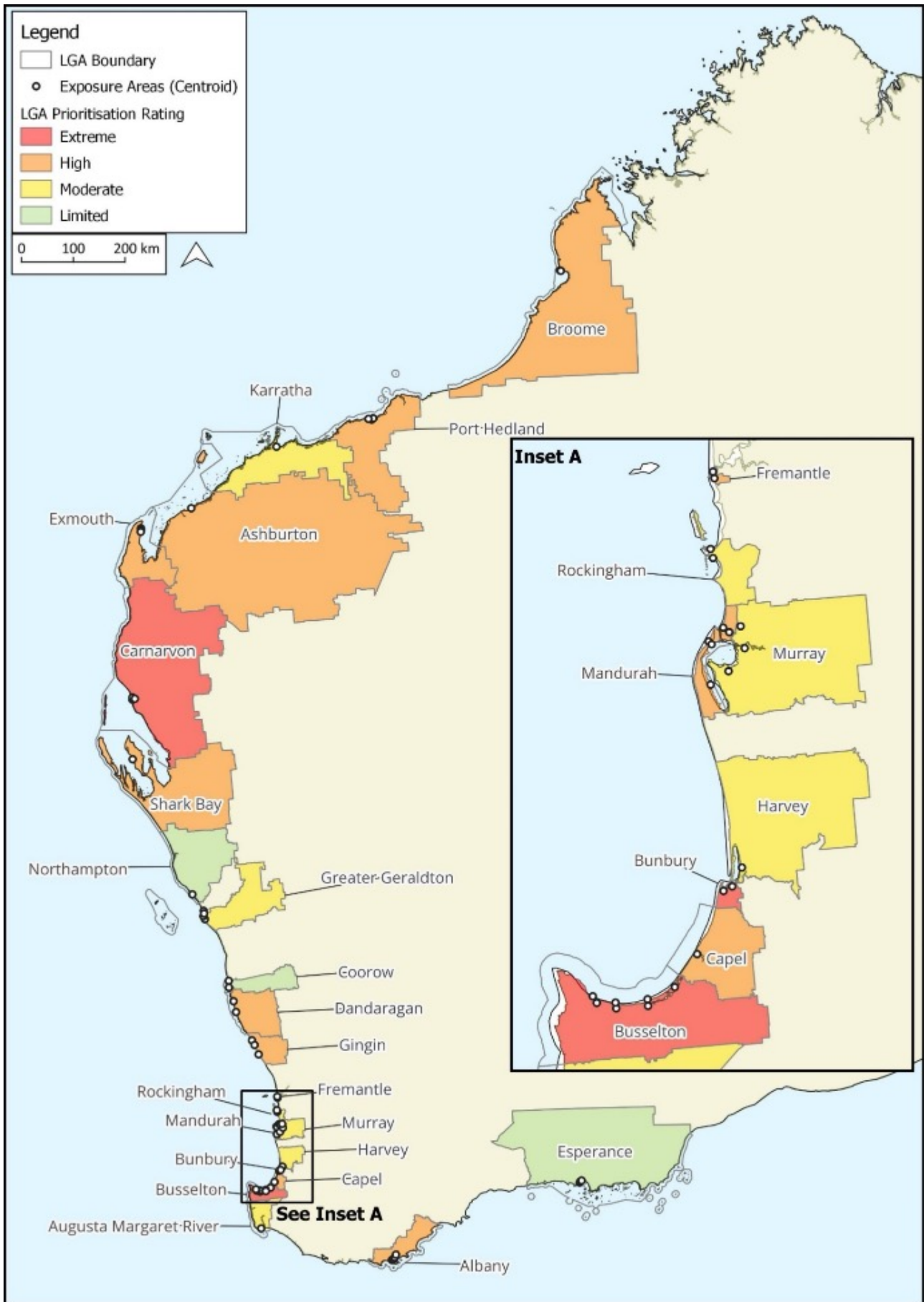
Site summaries were produced for 23 locations to provide an overview of findings. Of these, three sites were identified as being at high risk of inundation within the next 25 years.

Although inundation events are infrequent at most sites, the damage impact could be substantial, with \$10 – \$100 million in damages possible at individual townsites.

The coastal inundation assessment report is expected to be publicly released in September 2024.

	HIGH	EXTREME	EXTREME +0.9M
 # OF RESIDENCES	1,063	2,493	16,311
 # OF COMMERCIAL BUILDINGS	74	271	1,028
 # OF INDUSTRIAL BUILDINGS	8	60	200
 KM OF ROAD*	50	80	200
 CRITICAL SERVICES INFRASTRUCTURE	25km railtrack	50km railtrack 1 Nursing & Retirement homes 1 School 2 Wasterwater treatment / Management sites	130km railtrack 7 Nursing & Retirement homes 11 Schools 2 Wasterwater treatment / Management sites 3 Airports: Onslow; carnavon; Broome 4 Ambulance stations 1 Power station: Carnarvon

\* Roads considered in AEIP analysis are major to sun arterial roads only. No local roads are included.



**Figure 2:** Geographical locations of the 23 assessed coastal communities and their inundation risk ranking (Extreme, High, Moderate, Limited) over the next 25-years



## C. STUDIES AND REVIEWS

This component of the CoastWA Program is led by DoT.

### 1. Basic raw materials study

The state-wide assessment of the supply and demand of sand and armour rock used for coastal protection works commenced in November 2023. The two-year project assesses the available supply of materials at a regional level, both now and over a 25-year planning horizon. This will not only inform protection works but will also identify potential deficits in materials and outline factors that influence supply and further development of these resources. The project is expected to be completed in March 2025.



Active quarry face. Photo by DoT

### 2. Metocean data collection - wave buoys

DoT continues to manage a network of metocean instrument deployments which provide real time wave information for mariners and coastal communities. The program is part of an ongoing metocean wave monitoring program which continued throughout 2023-24 and is available on the DoT website.

### 3. Creation of coastal monitoring specifications and scopes

This project will develop the foundation for any local coastal manager to create a 10-year Coastal Monitoring Action Plan (CMAP). Sample scopes and specifications will be created and hosted on the DoT website for coastal data collection and monitoring, allowing an off-the-shelf solution for coastal managers to either gather coastal data directly or source this from consultants. Gathering baseline information is critical to enable eventual detailed design and option selection for erosion and inundation management. Following consultation with local coastal managers, the project also allowed for site-specific CMAPs to be created for local coastal managers that requested one. This included:

- Shire of Dandaragan
- Shire of Irwin
- Shire of Northampton
- Shire of Shark Bay
- City of Kwinana

The project commenced in January 2024 with an expected completion date of January 2025.

## D. HAZARD MAPPING AND DATA ACQUISITION

This component of the CoastWA program is led by DoT.

### 1. Individual hotspot management histories

The project commenced in November 2023 to review coastal management histories and performance at 12 coastal erosion hotspots. The following was undertaken for each of the 12 locations:

- a site visit;
- a meeting with the local coastal manager;
- development of a coastal management site summary and database of coastal management actions; and
- an assessment of the performance of management actions (using a Multi Criteria Analysis).

To date, project methodology has been developed using Quinns Beach (Figure 3, City of Wanneroo) as a pilot site. Site summaries have been prepared for Quinns Beach and Grannies Beach in the Shire of Irwin. A trial schematic of Quinns Beach is given in Figure 3 and illustrates the general circulation and sediment movement.

Site visits have been completed for Seabird and Grace Darling (Shire of Gingin), and C.Y. O'Connor (City of Cockburn) with draft site summaries to be finalised by July 2024. A site visit to the City of Mandurah Northern beaches has also been undertaken. The remaining sites scheduled for the second half of 2024 are the City of Kwinana Waterfront Industrial, Kwinana Beach, City of Rockingham Townsite and North Point Peron, the City of Busselton's Wonnerup Beach and City of Albany's Emu Point. The project is expected to be completed in December 2024.



Coastal erosion hotspot at Grace Darling Park, Lancelin. Photo by DoT





Figure 3: Quinns Beach – Coastal management schematics





## 2. Bathymetric LiDAR

In March 2023, Stage One (funded by CoastWA) of a two-stage program (Figure 4) commenced, to capture high-resolution LiDAR of the coastal and nearshore waters of selected areas on the Southern and Gascoyne coast.

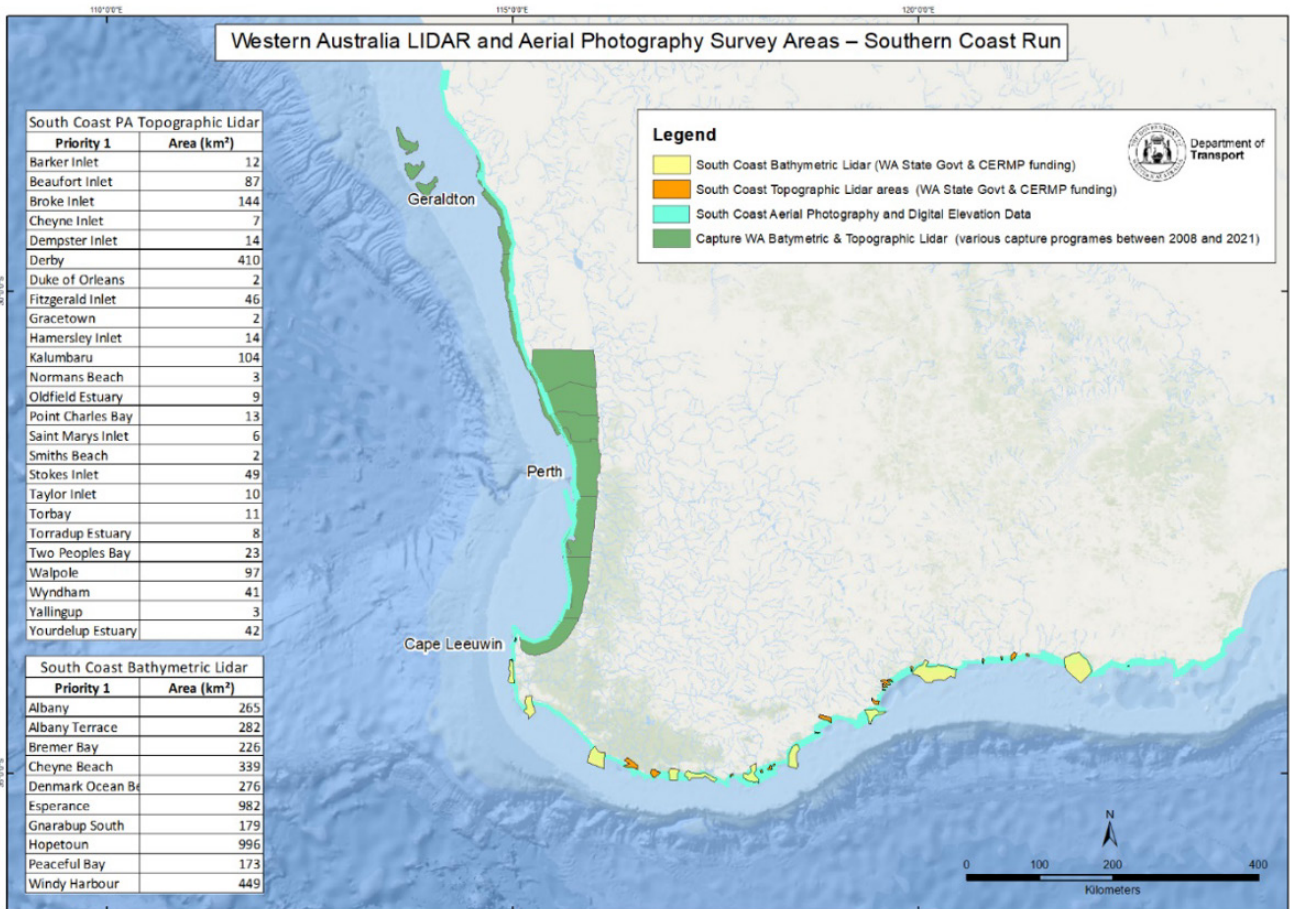
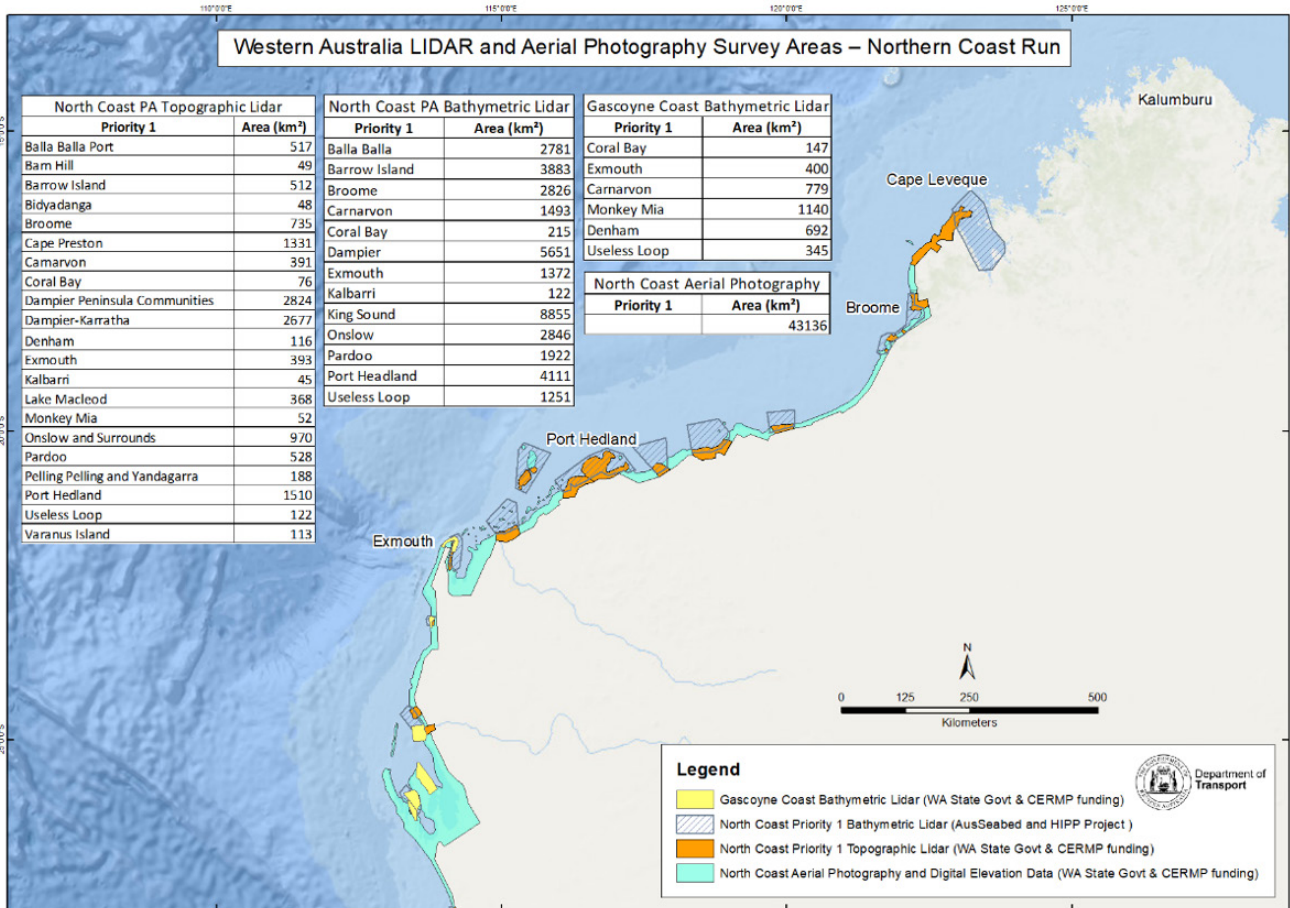
The erosion hotspot areas with bathymetric LiDAR capture and data process completed in 2023-24 are Esperance, Hopetoun, Smiths Beach/Yallingup and Windy Harbour at WA South coast, as well as Carnarvon, Coral Bay, Monkey Mia, Useless Loop/Denham at Gascoyne coast.

The State's coastline is a critical asset to the community and the economy. It is essential that the State conducts an updated coastal landform (topographic and aerial imagery) and seabed (bathymetric) capture to build coastal digital elevation models (DEMs). These DEMs will help develop a better understanding of potential social,

environmental and economic exposure, vulnerability and impacts. Capture of this data will be critical to better understand coastal hazards and their impacts. By extension, agencies will be better placed to quantify potential environmental, economic and social losses, and improve the State's emergency land use planning. Stage One is due for completion in September 2024.

Stage Two will focus on the northern regions of the State and will add an aerial imagery capture component to the program and is funded by a grant from the Australian Government's Coastal and Estuarine Risk Mitigation Program. This is expected to commence in late 2024.





**Figure 4:** The Two Stage Capture Program with proposed capture areas depicted

## E. COMMUNITY ENGAGEMENT, TRAINING AND EDUCATION

This component of the CoastWA program is led by DPLH.

### 1. Coastal values survey at coastal erosion hotspots

The University of Western Australia is progressing a three-year project to develop and implement a program of coastal values surveys at coastal erosion hotspots.

Presentations about the project have been recorded and provide information for local governments. An 'engaged coastal community' focus group and a 'general community' focus group were conducted in May 2024. An implementation schedule and survey instruments have been developed, with preparation undertaken for case studies in Broome, Mandurah (southern beaches), Stirling, Cambridge, Cockburn, and Rockingham (to be confirmed).

### 2. Community engagement, training and education strategy

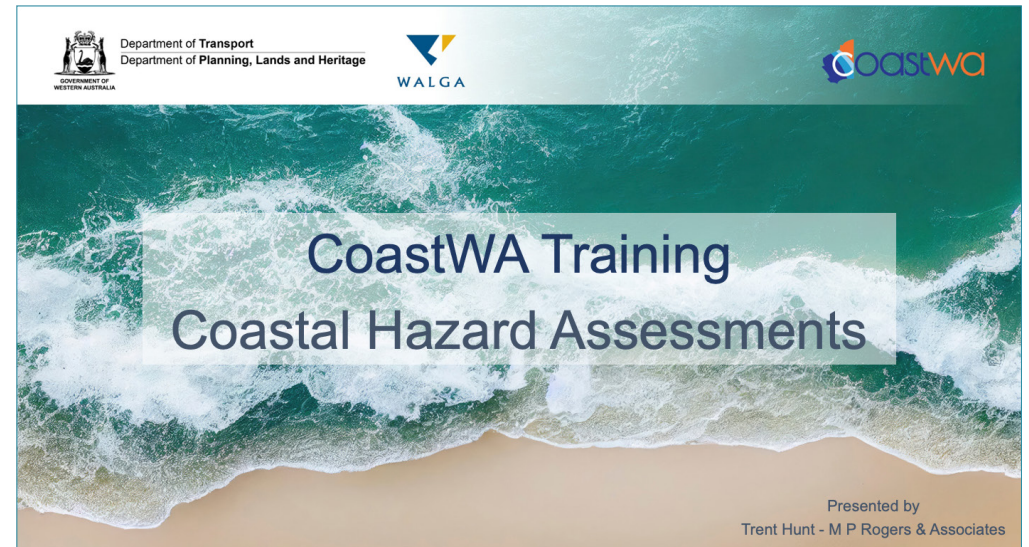
Engagement with the community and stakeholders is essential for educating and promoting understanding and implementation of coastal hazard risk management and adaptation planning (CHRMAP) and the State Planning Policy 2.6: State Coastal Planning Policy more generally. Actions from the Community Engagement, Training and Education Strategy (May 2023) are being implemented, with a focus on delivering modules as part of the CoastWA Training Series and continued provision of expert advice and technical assistance to stakeholders and the wider community. An expressions of interest process was initiated to find a host for a joint 2025 State and National Coastal Conference. This was unsuccessful and an alternative event will be planned for the second half of 2025.

### 2.1 Education and training program

The CoastWA Training Series aims to increase understanding of coastal processes and CHRMAP amongst coastal land managers such as local government officers, the broader community and other stakeholders including State Government agencies.

To date, six training modules have been delivered through in-person and online sessions (see Table 1) hosted at WA Local Government Association (WALGA). The first three modules were presented in July 2023 and August 2023, and the next three were presented between March 2024 and June 2024. In total, 445 attendees participated from across local government, State Government and other organisations.

Recordings of training sessions, fact sheets and PowerPoint slides are publicly available on the CoastWA page hosted on the DPLH website.





## 2.2 Expert advice and technical assistance

DPLH and DoT continue to provide expert advice and technical assistance to CoastWA grant recipients throughout the duration of projects including site visits when required, and through participation on project Steering Committees. Advice and technical assistance is also available to projects that have not received funding. More broadly, coastal policy advice is provided to the community and stakeholders including coastal land users and developers on an as needs basis.

WALGA, through the CoastWA Local Government Facilitator, has also organised workshops and forums for interested local governments, including a CoastWA grants information session and several CHRMAP forums.

**Table 1: CoastWA Training Series schedule**

Timing	CMPAP		Status
2022-23	1	Coastal processes and how they affect shorelines	Completed
	2	Coastal protection works	Completed
	3	Benefit Distribution Analysis	Completed
2023-24	4	CHRMAP implementation	Completed
	5	Coastal hazard assessments	Completed
	6	Vulnerability analysis and risk evaluation	Completed
2024-25	7	Adaptation options analysis	To commence in early 2025
	8	CoastAdapt – How to get the best out of the online tool	To commence in early 2025
2025-26	9	Determining the economic value of ‘non-market’ or intangible assets or values	To commence in late 2025
	10	Reviewed State Coastal Planning Policy (SPP2.6)	To commence in early 2026

## F. STAFF AND PROGRAM MANAGEMENT

### 1. Staffing

All CoastWA staff positions remained filled for DPLH in 2023-24, although there were some changes to staff at DoT. In April 2024, the CoastWA Principal Coastal Engineer moved to another position and recruitment for this position is underway and expected to be completed in August 2024. In June 2024, the CoastWA Oceanography Program Lead resigned, and a temporary arrangement has been put in place.

### 2. CoastWA Local Government Facilitator

Since October 2021, the CoastWA Local Government Facilitator has supported local governments to develop and implement CHRMAPs and access CoastWA funding.

In 2023-24 the CoastWA Local Government Facilitator:

- Met with the City of Kwinana, Shire of Carnarvon, City of Nedlands, Shire of Broome and Shire of Derby-West Kimberley. Visits were tailored to suit the needs of the local government, ranging from presentations on the CHRMAP process, site visits and assisting with grant preparation.
- Scheduled and facilitated 52 meetings between DPLH, DoT and individual local governments to discuss their coastal planning and management priorities over the next decade.
- Hosted an online CoastWA Grants Information Session in February 2024 in partnership with DPLH and DoT.
- Supported meetings of the local government CHRMAP Forum in September 2023, December 2023 and April 2024.
- Hosted six modules of the CoastWA Training Series including online and in-person sessions.

- Represented the interests of coastal and estuarine local governments on relevant State and Australian Government project/working groups.

### 3. Staff training and travel

Staff from DPLH, DoT and the CoastWA Local Government Facilitator participated in the following notable events:

- Australasian Coasts and Ports 2023 Conference held in Queensland on 15 – 18 August 2023.
- 2023 Joint National Coast to Coast and NSW Coastal Conference held in Newcastle on 30 October – 3 November 2023, co-hosted by the City of Newcastle and the Australian Coastal Society.
- Forum for Operational Oceanography held in Fremantle on 29 November – 1 December 2023.
- South Australia Coastal Councils Alliance 2023 Coastal Forum held in Adelaide on 7 December 2023.
- Australian Meteorological and Oceanographic Society Conference held in Canberra on 5 – 9 February 2024.



2023 Joint National Coast to Coast and NSW Coastal Conference held in Newcastle





## 4. Program management – Coastal Management Advisory Group

DPLH chairs and services the Coastal Management Advisory Group (CMAG). CMAG oversaw the Assessment of Coastal Erosion Hotspots in WA (2019) and provides overarching governance for delivery of the CoastWA program. It monitors progress and achievements of the CoastWA's objectives and targets.

CMAG meetings were held in August 2023, November 2023, February 2024 (out-of-session) and May 2024. Members are provided with presentations, reports and briefings. Key decisions included authorisation and realignment of budget allocations to ensure efficiencies and the effectiveness of specific projects.

### 4.1 Coastal Hazards Working Group and other national partnerships

The State Government has called on the Australian Government to prioritise coastal hazards management and adaptation as a national issue since the Premier raised it at COAG in 2019. In response, an intergovernmental Coastal Hazards Working Group (CHWG) was established and chaired by Western Australia with representatives from all jurisdictions and the Australian Local Government Association. In July 2023, the CHWG's report, *Towards a National Collaborative Approach to Managing Coastal Hazards in Australia*, was considered by the national Energy and Climate Change Ministerial Council (ECMC). The report has two key recommendations, the establishment of a National funding program





and preparation of a National Coastal Hazards Adaptation Strategy. It also calls for a lead agency to be identified within the Australian Government. ECMC agreed that strengthening and further development of a National collaborative approach and framework for coastal hazards be progressed.

The CHWG is currently considering how it can contribute to the preparation of the framework. In its recent submission to the National Adaptation Plan (NAP) Issues Paper, the CHWG has made the case that the NAP must include greater recognition of the importance of the coast and that there is a critical need to include a specific action to recognise and address the increasing impacts of climate change.

An economic assessment to support a business case to Infrastructure Australia for a WA Coastal Hazards Adaptation Program was commissioned in February 2024. To inform the project, consultation meetings have been held with 52 coastal and estuarine

local governments. A draft methods paper has been prepared and six case study sites have been identified: China Town, Broome; Point Moore, Geraldton; Cervantes; Kwinana/Rockingham; Abbey, Busselton; and Emu Point, Albany. The final economic assessment report is expected to be completed late in 2024.

DPLH and DoT collaborated with the Department of Fire and Emergency Services to encourage coastal managers and planners to develop coastal project funding proposals for submission to the Australian Government's Disaster Ready Fund program. Twelve applications totalling more than \$29.5 million have been submitted to address disaster resilience, risk reduction and the impacts of climate change and other natural hazards. Successful projects are expected to be announced in the second half of 2024.



## LOOKING FORWARD

The fourth year of the CoastWA program in 2024-25 will see continued implementation of a strategic response to the growing impacts of coastal hazards

On 1 July 2024, there were 42 active grant projects with a total remaining grant commitment of \$1,105,068. In 2024-25, a further 32 projects were approved and awarded a total of \$3,382,897 in grant funding.

Key priorities for 2024-25 are:

- Continuing support for coastal land managers to proactively plan and manage the coast.
- Administration of four coastal grants programs to support coastal land managers to prepare, implement and review CHRMAPs.
- Completion of a further 12 geotechnical surveys to investigate underlying bedrock at specific coastal erosion hotspots.
- Ongoing development of local coastal monitoring training, guidance and monitoring plans, including engagement and building data acquisition capacity among coastal Aboriginal rangers.
- Completion of the study of state-wide supply and demand of basic raw materials for beach renourishment and seawall/groyne construction.
- Completion of bathymetric LiDAR data surveys and hazards mapping of selected areas of the South coast and Gascoyne region.
- Review of coastal erosion hotspot and watchlist locations.
- Sediment cell identification for the South coast.

- Continuation of the three-year coastal values project including surveys and workshops in case study locations.
- Continuing rollout of the Community Engagement and Training program.
- Organisation of a coastal event in lieu of the 2025 joint State and National coastal conference, and to celebrate the 2025 WA Coastal Awards for Excellence.
- Completion of an economic assessment of the impacts of coastal erosion on WA and the benefits of adaptation, to support the development of a business case to Infrastructure Australia for a WA Coastal Hazards Adaptation Program.
- Continued support to the Coastal Management Advisory Group and inter-governmental Coastal Hazards Working Group.



## Attachment 1: Coastal Management Plan Assistance Program projects completed in 2023-24

Project	Grant recipient	CMPAP approved funding	Coastal manager contribution (cash and in-kind)
Shire of Murray Coastal Hazard Risk Management and Adaptation Plan	Shire of Murray	\$75,000	\$160,307
City of Greater Geraldton Coastal Node Master Planning	City of Greater Geraldton	\$40,000	\$41,865
City of Stirling Coastal Hazard Risk Management and Adaptation Plan	City of Stirling	\$64,734	\$91,331
Jurien Bay Central Foreshore Adaptation Investigation	Shire of Dandaragan	\$50,000	\$47,207
Town of East Fremantle Coastal Hazard Risk Management and Adaptation Plan	Town of East Fremantle	\$47,750	\$82,125
Cockburn Coastal Protection Benefit Distribution Analysis	City of Cockburn	\$25,000	\$29,912
Review of Shire of Denmark Coastal Reserves Management Plan	Shire of Denmark	\$60,000	\$47,000
<b>Total</b>		<b>\$362,484</b>	<b>\$499,747</b>



## Attachment 2: Coastwest projects completed in 2023-24

Project	Project partners	Coastwest approved funding	Partner contributions
Broome Town Beach Foreshore Management Plan	Shire of Broome	\$25,000	\$68,500
Collaborating Coastcare in the Northern Agricultural Region	Northern Agricultural Catchments Council; Jurien Bay Regional Herbarium Group; Shire of Dandaragan	\$4,996.10	\$29,625
Mosman Beach Rehabilitation Project	Friends of Mosman Park Bushland; Beehive Montessori School; Town of Mosman Park	\$22,526	\$68,271
Growing the Intertidal Community of Broome	Environs Kimberley; Department of Primary Industries; Museum of WA; Shire of Broome; Roebuck Bay Working Group; Department of Biodiversity, Conservation and Attractions	\$50,000	\$78,173
Point Samson Invasive Tree Management and Dune Restoration	City of Karratha	\$30,000	\$38,062
Sutherland Street Shared Path Dune Rehabilitation	Care for Hedland; Kariyarra Aboriginal Corporation	\$18,314	\$18,314
Grey's Beach - Point Moore Stage 2	Batavia Coast Network; City of Greater Geraldton	\$19,968	\$20,362
Sunset Beach Dune Stabilisation	Batavia Coast Network; City of Greater Geraldton	\$10,000	\$16,372
Mullaloo Beach Erosion and Rehabilitation 2022-23	Mullaloo Beach Community Group Inc; City of Joondalup	\$22,801	\$65,630
Rehabilitation of Ocean Reef - Iluka Foreshore Reserve	Joondalup Community Coast Care Forum Inc; Friends of North Ocean Reef-Iluka Foreshore; City of Joondalup	\$19,720	\$29,364
Cambridge Coastcare Floreat Dune Restoration Phase 3	Cambridge Coastcare; Perth NRM; Town of Cambridge	\$18,264.95	\$47,157
Restoring a TEC and increasing species diversity in the Trigg Coastal Region	Stirling Natural Environment Coastcare; Friends of Trigg Bushland; Perth NRM; St Mary's Anglican Girls School; City of Stirling	\$49,405	\$136,234
Rehabilitation of Safety Bay Foreshore Reserve	City of Rockingham; Safety Bay Yacht Club; Perth NRM	\$10,735.20	\$27,816
Perth NRM's Adopt A Beach Program	Perth NRM	\$71,152.40	\$341,973

Project	Project partners	Coastwest approved funding	Partner contributions
Coastal Capacity Building: Empowering Perth's Southern Community	WA Coastal and Marine Community Network; WA Landcare Network	\$56,104	\$174,870
Reconnecting Coastal Communities in the Southwest and Peel Region	CoastSWaP	\$8,184	\$13,768
Implementation of the Prevelly Gnarabup Foreshore Management Plan	Nature Conservation Margaret River; Margaret River Coastal Residents Association; Shire of August Margaret River	\$27,611	\$53,767
Protecting Tjaltjraak Boodja Park, Stage 2 Coastal Restoration & Sustainable Recreation	Shire of Esperance; Esperance Tjaltjraak Native Title Aboriginal Corporation; Condingup Primary School; Duke of Orleans Bay Caravan Park	\$44,580	\$116,194
Albany Senior High School Marine Science Project	Albany Senior High School; Edith Cowan University; Murdoch University; Department of Primary Industries and Regional Development	\$11,452.11	\$264,941
<b>Total</b>		<b>\$520,814</b>	<b>\$1,609,393</b>



### Attachment 3: Coastal Adaptation and Protection grant projects completed in 2023-24

Project	Grant recipient	CAP approved funding	Partner contributions
Shoreline monitoring of Broome townsite – Year 5	Shire of Broome and Nyamba Buru Yawuru	\$9,372	\$9,372
Surf Beach nature-based stabilisation	Shire of Irwin	\$86,319	\$86,319
Offshore sediment source investigations	City of Wanneroo	\$30,585	\$30,585
Disability water access ramp – detailed design	City of Stirling	\$16,155	\$16,155
Bathers Beach and South Beach coastal monitoring program Y22-Y23 – Year 2	City of Fremantle	\$31,082	\$31,081
Port, Leighton and Mosman Beaches coastal monitoring program Y22/23 – Year 2	City of Fremantle, Town of Mosman Park, and Fremantle Ports	\$37,895	\$43,895
Coastal monitoring – Year 10	City of Busselton	\$34,531	\$34,531
Gnarabup Beach sand nourishment	Shire of Augusta Margaret River	\$12,422	\$12,422
Monitoring Coastal Hotspots - Year 3	City of Greater Geraldton	\$20,809	\$24,971
Cervantes Detailed Design of Coastal Management Options	Shire of Dandaragan	\$84,203	\$84,203
Sand Nourishment - Grace Darling Park to Edward Island Point, Lancelin - Year 4	Shire of Gingin	\$45,000	\$47,600
Coastal Monitoring from Nedlands to Wanneroo	Northern Beaches Alliance	\$71,775	\$71,775
Quinns Beach and Yanchep Sand Nourishment	City of Wanneroo	\$100,000	\$113,243
Quinns Beach and Yanchep Wave Buoys	City of Wanneroo	\$32,525	\$32,525
Sand Bypassing Program - Year 5	City of Joondalup	\$130,084	\$183,966
Water Access Ramp - Replacement Ramp Construction	City of Stirling	\$79,369	\$79,369
Long Term Coastal Monitoring	Town of Cottesloe	\$15,690	\$15,690
Coastal Protection Options for Doddies Beach	City of Mandurah	\$21,095	\$23,878
Design for Upgrade of Seashells Seawall	City of Mandurah	\$9,905	\$9,905
<b>Total</b>		<b>\$868,816</b>	<b>\$951,485</b>

#### Attachment 4: H-CAP projects completed in 2023-24

Project	Grant recipient	H-CAP approved funding	Partner contributions
Port Beach Sand Nourishment - Phase 2 Dune Creation and Stabilisation	City of Fremantle	\$341,635	\$75,000
Sunset Beach Stage 2 – GSC Groynes and Sand Nourishment	City of Greater Geraldton	\$702,620	\$663,063
	<b>Total</b>	<b>\$1,044,255</b>	<b>\$738,063</b>