



OOStWO 2024-25 Achievements



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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
- 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 (WAPC), 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 fourth year of the program (2024-25).

CoastWA comprises six elements

Coastal grants (DPLH & DoT)

Staff, program management and in-house projects (DPLH & DoT)

Erosion hotspot assessment. ground truthing and monitoring (DoT)

Studies



Community engagement, training and education (DPLH)

and reviews (DoT)

Hazard mapping and data acquisition (DoT)



Summary of key achievements in 2024-25

Coastal grants

CoastWA grants activity	СМРАР	Coastwest	САР	H-CAP	Total
Projects initiated in 2024-25 (funding awarded)	5 \$382,000	14 \$472,897	12 \$900,000	1 \$1,660,000	32 \$3,414,897
Total projects monitored in 2024-25	22	30	19	3	74
Projects completed in 2024-25	4	10	13 + 1 project cancelled	2	29
Payments made in 2024-25	\$450,460	\$715,212	\$767,746	\$660,373	\$2,593,791
Active projects as at 1 July 2025	18	19	6	1	44
New 2025-26 projects approved (funding awarded)	4 \$438,266.50	10 \$371,796	12 \$900,000	1 \$1,320,000	27 \$3,030,062.50

- ✓ Four **CMPAP** projects were completed including one adaptation options assessment at Mettams Pool (City of Stirling), and three Coastal Hazard Risk Management and Adaptation Plans (CHRMAP) involving six local governments.
- √ 10 Coastwest projects were completed with seven involving. on-ground activities such as dune stabilisation and rehabilitation. Other projects focused on site planning, monitoring and capacity building.
- √ 13 CAP projects were completed, including shoreline monitoring, structural repairs at City Beach and sand nourishment at Albany, Joondalup, Stirling and Gingin.

✓ Two H-CAP projects were completed. The installation and operation of permanent sand back-passing infrastructure between Bandy Creek Boat Harbour and Castletown Beach (Esperance), and implementation of a combined managed retreat and protection strategy at Ocean Beach (Denmark), with relocation of the Surf Life Saving Club boat shed and construction of a new retaining wall.

Ground-truthing, monitoring and inundation assessment

Ground-truthing

✓ Stage 3 – Geotechnical site surveys at an additional seven sites were completed.

Coastal Monitoring Program

- ✓ Six coastal Aboriginal rangers were trained as qualified drone operators to undertake beach monitoring.
- ✓ Nine local governments worked together with Aboriginal Corporations to deliver ongoing and innovative beach monitoring.

Creation of coastal monitoring specifications and scopes

- ✓ Sample scopes and specifications for coastal (onshore) data collection/monitoring have been developed.
- ✓ Five 10-year Coastal Management Action Plans for local governments have been developed.

Coastal structure condition inspections

 Detailed coastal structure condition inspections at Kwinana and Seabird completed.

Coastal inundation assessment

✓ A comprehensive statewide coastal inundation assessment was completed and published.

- ✓ An online portal to visualise coastal inundation at 23 identified locations was developed and published.
- ✓ Studies to support the development of an Australian Government funding submission to manage Carnarvon coastal inundation were undertaken, including engineering concept design, a cost benefit analysis and independent cost review.

Studies and reviews

Basic raw materials study

✓ The assessment of supply and demand for sand and armour rock used for coastal protection works was completed for the Perth Metropolitan, Peel and South West regions.

Metocean data collection

✓ Two offshore wave buoys at Geraldton and Bremer Bay continued to provide near real time data transmission for wave height, period and direction. Data collected and two wave buoy reports are available on the DoT website.

Hotspot review

- ✓ The WA Coastal Erosion Hotspots Review of Impacts, Management Actions, and Funding 2018-19 to 2024-25 (DoT) was published.
- ✓ A formal update of the 2019 Assessment of Coastal Erosion Hotspots in WA commenced.



Hazard mapping and data acquisition

Individual hotspot management histories

✓ The review of coastal management histories and performance at 12 coastal erosion hotspots was completed.

Bathymetric Light Detection and Ranging (LiDAR)

- ✓ High-resolution LiDAR of the coastal and nearshore waters on the Southern and Gascoyne coast was captured and published on DoT's bathymetry portal.
- ✓ Successful Disaster Ready Fund (DRF) submission for \$7.6 million to expand the LiDAR capture along parts of the northern Gascoyne, the Pilbara and Kimberley coasts.

Sediment cells identification for the South Coast

✓ Mapping of sediment cells along the WA South Coast commenced. The project is part funded by CoastWA and DRF.

Community engagement, training and education

- ✓ The coastal values project progressed with stakeholder workshops and surveys completed for case studies in Broome, Mandurah, Stirling, Cambridge, Cockburn and Rockingham.
- ✓ The CoastWA Training Series delivered nine modules to date via in-person and online sessions, with a total of 534 attendees.
- DoT and DPLH continued to provide expert advice and technical assistance to coastal land managers, stakeholders and community through funded projects and on ad hoc basis.

Staff and program management

- ✓ Three meetings of the interagency Coastal Management Advisory Group.
- ✓ Three meetings of the intergovernmental Coastal Hazard Working Group.
- ✓ An Economic Assessment of Coastal Hazards in WA was completed



A. COASTAL GRANTS

Coastal grants are a major element of the CoastWA program representing around 50 per cent of its budget. The grants support local coastal managers and community groups to proactively plan and manage their coastal reserves. The annual grants generally open in February and close in April for funding in the following financial year.

In the fourth year of the CoastWA program, 32 projects were awarded a share of \$3,414,897 in grant funding. Applications for the 2025-26 grants opened on 22 January and closed 14 April 2025.



February Minister opens

grants

April

Applications

close

May

Grant

assessment

October

Projects

commence

September Signing of

funding

agreements

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 DPI H on behalf of the WAPC.

In 2024-25:

- Five projects were initiated totaling \$382,000 in CMPAP funding, leveraging \$410,000 in partner contributions (total project value of \$792,000).
- 22 projects (including 17 projects from previous years), across 23 local governments, were administered and monitored, with project Steering Committee involvement from DPLH staff and in some instances DoT staff.
- Four projects were completed, supported by \$380,000 in CMPAP funds and \$391,739 in cash and in-kind contributions from coastal managers (see Attachment 1):
 - Capel Leschenault CHRMAP (covering Shire's of Dardanup, Harvey, Capel and City of Bunbury)
 - Windy Harbour CHRMAP
 - Hopetoun CHRMAP
 - Mettams Pool Adaptation Options Assessment.
- \$450,460 in grant payments were made.

- Eight applications were received requesting \$716,356 in CMPAP funding.
- Four projects were approved to commence in 2025-26, supported by \$438,266.50 in CMPAP funding and leveraging \$548,266.50 in partner contributions (total project value of \$986,533).



Cathedral Rocks, Windy Harbour (image sourced from Shire of Manjimup)

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 2024-25:

- 14 grants were initiated totaling \$472,897 in Coastwest funding, leveraging \$1,412,547 in partner contributions (total project value of \$1,885,444).
- 30 projects, including 16 projects from previous years, were monitored.
- 10 projects were completed, supported by \$335,889 in Coastwest funds and \$841,385 in cash and in-kind contributions from project partners (see Attachment 2).
- The 10 completed projects included:
 - One local area or site planning project
 - One monitoring project
 - One capacity building project
 - Seven on-ground projects.
- For every dollar invested by Coastwest, nearly \$3 was secured in contributions from project partners. Thirty community groups, educational institutions, natural resource management organisations and other not-for-profit organisations participated in projects along with eight coastal local governments.
- \$715,212 in grant payments were made.
- 27,532 seedlings were planted.
- 134,900 square metres of weeding was carried out.
- 570 metres of fencing was installed or repaired to protect vegetation and sensitive areas.

- 4,740 square metres of dunes protected by brushing and erosion control.
- 7.074 volunteers involved.
- Volunteer contributions of 10,895 hours (valued at \$30 per hour) and cash contributions valued at \$437,075 plus \$404,310 in other contributions.
- 34 days of workshops, training and information sessions.
- 25 days of environmental monitoring.

- 13 applications were received requesting \$424,555 in Coastwest funding.
- 10 grants were approved to commence in 2025-26, supported by \$371,796 Coastwest funds and leveraging \$1,165,714 in partner contributions (total project value of \$1,537,510).



Dune rehabilitation at Floreat Beach (image sourced from Cambridge Coastcare)



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 provides non-financial assistance, project administration and oversight such as engineering and technical guidance and advice, project scoping and provision of coastal data.

In 2024-25:

- 12 projects were initiated totaling \$900,000 in CAP funding, leveraging \$1,531,115 in partner contributions (total project value of \$2,431,115).
- 19 projects were monitored, including seven carried over from previous years.
- 13 projects were completed, supported by \$826,469 in CAP funds and \$1,422,750 in partner contributions (see Attachment 3), comprising:
 - Seven monitoring projects at Broome townsite, Cottesloe, South Fremantle, Cockburn, Geographe Bay, Perth's northern suburbs and Geraldton's erosion hotspots.
 - One investigation project to undertake plume and nearshore wave modelling and study of benthic habitat offshore of Wanneroo coastline.
 - One maintenance project at City Beach groyne and vertical wall repair.
 - Four adaptation projects including sand nourishment at Emu Beach, Grace Darling Park and Mettams Pool, and sand bypassing in Joondalup.
- \$767,746 in grant payments were made.

- 26 applications were received requesting \$1,638,303 in CAP funding.
- 12 projects approved to commence in 2025-26, supported by \$900,000 CAP funding and leveraging \$1,216,266 in partner contributions (total project value of \$2,116,266).



Sand nourishment project at Mettams Pool (image sourced from 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 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 2024-25:

- One adaptation project was initiated in the Shire of Broome, supported by \$1,660,000 in grant funding and \$1,472,822 in partner contributions, for a total project value of \$3,132,822. This initiative forms part of the broader \$60 million redevelopment of the Cable Beach Foreshore. The project comprises three key components including the construction of a 105-metre rubble mound seawall, integration of an access ramp within the seawall, and installation of drainage infrastructure. To tie in the seawall with landscaping works completed under Stage 2 of the Walmanyjun Cable Beach Foreshore Redevelopment, the project timeline has been extended by 12 months, with completion now expected by mid-2026.
- Two projects were completed, supported by \$2,250,058 in H-CAP funds and \$2,266,535 in partner contributions (see Attachment 4):
 - The Shire of Esperance's two-year project to construct the Castletown Beach sand back-passing pipeline received a total grant of \$950,000. Partner contributions totaled \$509,196, with the total project cost of \$1,459,196. To support the project, an Acoustic Wave and Current measuring device was placed on the seabed at Esperance to record wave and current data during the first year of the pipeline's operation.
 - The Shire of Denmark's Ocean Beach coastal adaptation project received a total grant of \$1,300,058. The project involved relocation of a boat shed and replacement of the Surf Life Saving Club retaining wall. Partner contributions totaled \$1,757,339, with the total project cost of \$3,057,397.

- Invitations were sent to local managers to promote the opening of grant applications from 22 January to 14 April 2025.
- One application was received from the City of Mandurah requesting \$1,020,640 in H-CAP funding. The project proposed repairs and upgrades to the Town Beach seawall/revetment, located just southwest of coastal erosion hotspot #36 (Mandurah Northern Beaches). The works align with the 'protect' strategy outlined in the City's Northern Beaches CHRMAP (GHD 2023). The project includes repacking and reinforcing of the existing limestone revetment, backfilling crest voids, constructing a new revetment on the eastern flank with limestone armour. bedding, and geotextile layers. Additional improvements include landscaping, fencing and protection of existing infrastructure such as access stairs.
- The City of Mandurah was approved a grant of \$1,320,000 which included additional funding to expand the project scope, including works to the west. The estimated cost of the project will be up to \$1,750,000 with an estimated contribution from the City being \$430,000.







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

1. Ground-truthing

Stage 3 geotechnical site survey was undertaken in 2024-25. The survey produced 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 3 was completed in February 2025 and involved the following seven coastal sites threatened by erosion and inundation:

- 1. Emu Point, City of Albany
- 2. Harbourside, City of Albany
- Yallingup, City of Busselton
- 4. Old Dunsborough, City of Busselton
- 5. Bunbury Oceanic Drive Peppermint Grove, City of Bunbury
- 6. Rockingham/Warnbro Sound, City of Rockingham
- 7. Kwinana Beach extending towards the Industrial Area, City of Kwinana

Stage 4 procurement, for an additional five sites, has commenced.



Geotechnical survey underway with Geophones laid out and used to record sound waves reflecting on underground rock layers (images sourced from DoT)



2. Coastal monitoring program

A project to undertake beach monitoring using unmanned aerial vehicle (UAV) drones commenced in January 2024 and was completed in May 2025. The project is a partnership between DoT and the Peron Naturaliste Partnership and was co-funded by CoastWA and the DRF.

A key goal of the project was to build capability by training Aboriginal rangers to be certified drone pilots and survey technicians. Six Aboriginal rangers took part in the capture program and completed a number of key tasks:

- Enrolment into the five-day CASA certified Remote Pilot training course
- Conducting surveys of photo control points and check points used during data processing to accurately build a mosaic of the captured images, available for viewing via a web portal Drone Beach Capture Program Web App
- Acted as 'spotters' to manage public access to the beach during drone operations.

The monitoring program delivered high-resolution imagery and digital elevation data at 10 coastal erosion hotspots along 200 kilometres of coastline between Rockingham and Busselton.



Drone team during operations (image sourced from DoT)

Drone team member conducting GPS survey of beach control (image sourced from DoT)



3. Creation of coastal monitoring specifications and scopes

Gathering baseline information is critical to enable eventual detailed design and option selection for erosion and inundation management. This project develops the foundation for any local coastal manager to create a 10-year Coastal Monitoring Action Plan (CMAP).

In May 2025, nine sample scopes and four specifications were completed for key coastal data collection and monitoring actions. These allow an off-the-shelf solution for coastal managers to either gather coastal data directly or source this from consultants. The scopes and specifications prepared are:

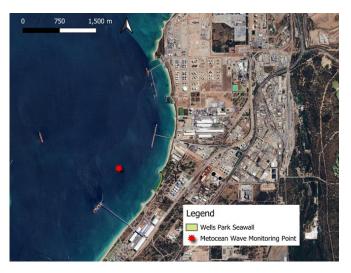
- Beach Survey Transect Specification
- Photomonitoring Specification
- Storm Monitoring Specification
- Drone Survey and Images Specification
- Benthic Habitat Scope
- Coastal Structures Inspection and Assessment Scope
- Geotechnical and Geophysical Inve4stigation Scope
- Hydrographic Surveying Scope
- Metocean Data Collection Scope
- Photographic Monitoring Scope
- Professional Data Analysis and Reporting Scope
- Sediment Sampling and Analysis Scope
- Shoreline Mapping Scope.

Following consultation with local coastal managers, the project also prepared site-specific CMAPs for requested areas. This included:

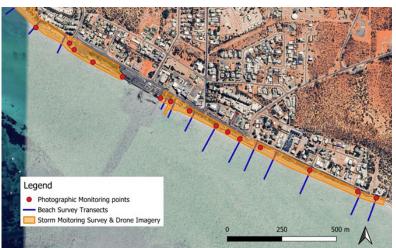
- Shire of Dandaragan
- Shire of Irwin

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

Example of recommended location for metocean data collection from City of Kwinana CMAP



Example of coastal monitoring recommended at Denham from the Shire of Shark Bay CMAP



4. Coastal structure condition inspection

Previous CMAPs and CHRMAPs have identified the importance of condition inspections at some key coastal hotspots. Subsequently, inspection and condition assessments were completed for the Seabird seawall and also the Kwinana and Challenger Beach revetments to support coastal management.

The assessments included:

- Visual walkover inspections of the above water portions of the revetments.
- Assessment of the structural, functional and overall condition.
- Provision of recommendations for future maintenance and monitoring works.



Seabird seawall, Shire of Gingin (image source DoT)



Kwinana Beach revetment (image source DoT)



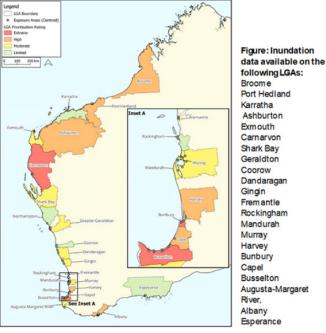
5. Coastal inundation identification and assessment

The statewide inundation assessment was completed in September 2024, and a web-based mapping portal was developed to allow users to interrogate inundation impacts to 23 coastal communities, investigated in the original study, over a range of water levels. Accompanying the web portal are site summaries and damage estimates. The portal can be accessed at Coastal Inundation EB.

Coastal Seawater Inundation Web Map

The threat of sea level rise impacting large areas of our coastline is a significant issue. To investigate this threat the Department of Transport commissioned Seashore Engineering Pty Ltd to undertake a state-wide assessment of the scale and extent of WA coastal inundation.

To better inform and support local communities, the portal (below) allows the user to map the potential localised inundation extent and examine the inundation pathways to manage the threat.



following LGAs: Port Hedland Dandaragan Rockingham Augusta-Margaret

The cover of the inundation web-based portal and the user guide

C. STUDIES AND REVIEWS

1. Basic raw materials study

The assessment of the supply and demand of basic raw materials used in coastal engineering purposes was completed in March 2025. This 18-month study specifically considered the supply of coarse sand, suitable for nourishment, and rock for construction of erosion mitigation structures. The study considered all regions, with a focus on the Perth Metropolitan, Peel and South West regions.

Given the geographical extent of the study, the findings varied across the regions. The South West region was found to face significant constraints with supply of appropriate materials for coastal engineering purposes that are expected to worsen in the long-term. In the Perth region the physical presence of appropriate material is not an issue, instead the sterilisation of the resource has resulted in supply constraints. Further, it was noted that production rates are relatively fixed, and there is limited ability to accommodate large infrastructure without substantial impact on the overall market.

Coastal engineering purposes constitute a fraction of the overall demand for basic raw materials when considered against the demand from general industry and broader infrastructure projects. The study provides recommendations aimed at alleviating the identified issues, broadly categorised under addressing knowledge gaps, opportunities to increase the supply of basic raw materials, and opportunities to utilise alternative materials to supplement demand.

> Common materials used for coastal adaption works near key development nodes

No Limit (NL) — Material widely available within a reasonable distance of 50 km, at approved quarries. Limited (L) - Some resources are available in approved quarries. Current and potential future resources are limited in size, location, availability and Limited (LT) - Materials are available at operating quarries or future resources but large distances > 100 km Restricted (R) - Small local resources may be available depending on additional work and approvals reloped (UD) – Resource is available but is undeveloped and requires all approvals, some of which such as native vegetation may be limiting. Wyndham D/BS= NL.R D/BS= NL,R SS= SS= R NI R Port Headland TI R= TIR= IT 1 T D/BS= NL,R GR= LIT GR= LIT SS= NL.R SR= R,LT SR= AS= NI LR= L LR= TLR= LT Broome D/BS= NL.R GR= LR= NL SS= NL.F TLR= LT D/BS= R GR= LLT SS= SR= R,LT TLR= Onslow Kimberley LR= - 1 GR= D/BS= NL.R LR= SS= NL,R TIR= GR= R,UD,LT Carnarvon LR= D/BS= R SS= Legend AS= NL Calcareous TLR= NL Pilbara Dredge / Beach Sands (D/BS) GR= R.UD.LT Silica -LR= Silica Sands (SS) Alluvial Sands (AS) Shark Bay Bassendean Sands (BS) Denham Hard Rock -D/RS= R Tamala Limestone (TLR) Gascovne SS= Granite (GR) AS= Laterite (LR) TLR= NL (BR) R,UD,LT GR= Mid West Sandstone (SR) Geraldton LR= D/BS= R SS= NI TI R= NL GR= Dongara LR= Goldfields-D/RS= R SS= NL **Esperance** TLR= GR= LR= Wheatbelt **PERTH** Perth Jurien-Lancelin D/BS= R D/BS= R Peel BS= NL SS= TLR= TLR= GR= NL GR= R,UD,L,LT LR= LR= L South, Great West Southern Bunbury-Busselton Albany Walpole Augusta Esperance D/BS= R Peel D/BS= R SS= Denmark D/BS= R SS= D/BS= R GR= L,LT,R D/BS= R SS= SS= GR= NL BS= R BS= L,LT SS= GR= TLR= L BS= NL TLR= R LR= GR= L, LT LR= L GR= NL SR= GR= NL BS= L,LT LR= LR=

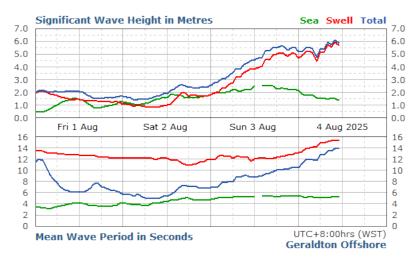


2. Metocean data collection - wave buoys

DoT manages a network of wave buoys which provide near-real time wave information including wave height, period and direction for mariners and coastal communities. This activity is part of an ongoing metocean wave monitoring program and is available on the DoT website.

As part of the CoastWA program, two offshore wave buoys were deployed and integrated into the existing wave buoy network at Bremer Bay and Geraldton. They have been in operation since December 2022 and March 2023, respectively. Near-real-time data from these buoys can be viewed on the DoT website at Bremer Bay wave data | Transport WA and Geraldton wave data | Transport WA.

Comprehensive technical reports reviewing the data collected by the two wave buoys were published on the DoT website in September 2024 These included the Geraldton Wave Data Summary 2023-24 and the Bremer Bay Wave Data Summary 2023, both available via Coastal studies | Transport WA.



Geraldton wave buoy data available on the DoT website

3. Erosion hotspot review

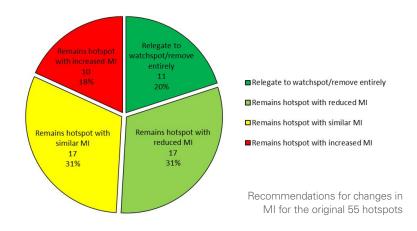
DoT has prepared a report titled WA Coastal Erosion Hotspots -Review of Impacts, Management Actions, and Funding 2018-19 to 2024-25. Undertaken as an interim review and update of the original erosion hotspots assessment, the report examines changes and provides an understanding of the impact of CoastWA to date.

The review was developed through consultation and information gathering from local coastal managers. The report provides updated Management Importance (MI) for WA's coastal erosion hotspots and watchspots between 2018-19 and 2024-25.

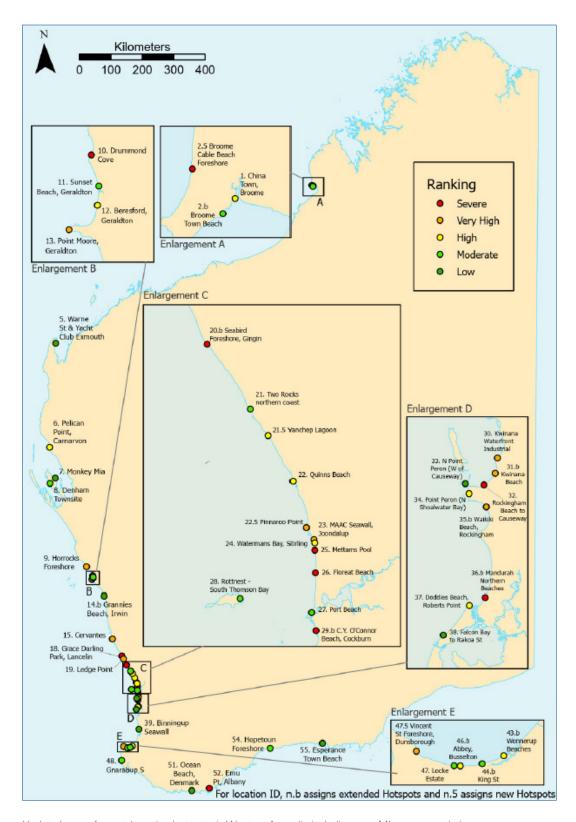
The review suggests hotspots can be re-ranked in management importance after consideration of changing risks, funding allocations and work undertaken between 2018-19 and 2024-25. It recommends an overall net reduction down from 55 to 48 locations, despite the addition of four new hotspots.

Overall, the review found that following the successful outcomes of CoastWA, over half of all hotspot sites may be either downgraded in severity or reclassified to watch spot status.

The review recommendations are preliminary and will be examined by a formal hotspot reassessment consultancy in 2025-2026.







Updated map of coastal erosion hotspots in Western Australia including new MI recommendations





Example of changes between 2018-19 (top) and 2024-25 (bottom) at Laurentius Point hotspot, Port Hedland

D. HAZARD MAPPING AND DATA ACQUISITION

1. Individual hotspot management histories

Design of future coastal management requires a comprehensive and complete record of past activities. This record is also beneficial when assessing the performance of existing coastal management measures.

Completed in June 2025, this project compiled a record of coastal management activities at 12 coastal erosion hotspots. These historical records provide valuable insights into key factors influencing local coastal managers' decisions when selecting appropriate management strategies.

The 12 hotspot locations covered by the study were:

- Grannies Beach, Irwin
- Grace Darling, Lancelin
- Seabird, Gingin
- Quinns Beach
- C.Y. O'Connor Beach
- Kwinana Waterfront Industrial
- Kwinana Beach
- Rockingham Townsite to Causeway
- North Point Peron
- Mandurah Northern Beaches
- Wonnerup Beaches
- Emu Point, Albany

Coastal management measures implemented at each of the 12 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
- an assessment of the performance of management actions.

A report was also prepared to capture key lessons learned from managing the 12 sites focusing on the effectiveness of the key coastal management measures. The study found many local governments used a range of coastal management techniques, including alternative and traditional methods to find the solution that best suited their coast, community and resources available.

ID		Groynes	Seawall/ Revertment	Nourishment	Revegetation	Other	CHRMAP
14	Grannies		1	√ (Historical)	1	Concrete stabilisation	2016
18	Grace Darling (Lancelin)						2023
20	Seabird		1	√ (Historical)	1		2023
22	Quinns Beach	1	✓	1			2018
23	C.Y. O'Connor Beach	1	✓	✓	✓	Submerged reef	2015
30	Kwinana Industrial	1	1		✓	Artificial headlands	2016
31	Kwinana Beach		✓	✓	✓	Artificial headlands	2016
32	Rockingham	1	1	1			2019
33	North Point Peron	1	√	✓			2019
36	Mandurah Northern Beaches	1	1	✓	✓		2022
42 43	Wonnerup	1	1	1			2022
52	Emu Point	✓	✓	✓		Artificial headland	2019





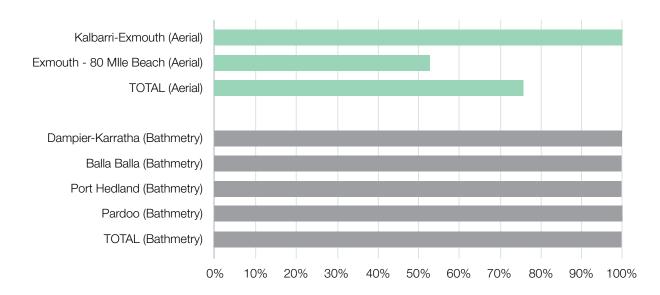
Coastal management schematic for Emu Point, Albany

2. Bathymetric LiDAR

The State's coastline is a critical asset to the community and the economy. An updated coastal landform (topographic and aerial imagery) and seabed (bathymetric) capture to build coastal digital elevation models (DEMs) is essential.

The high-resolution LiDAR capture of the WA coast commenced in 2023 and will be completed by June 2026. The capture areas extended along the Southern and Gascoyne, Pilbara and Kimberley coasts. The program was funded using \$3 million of CoastWA funding as the co-contributor to a successful \$10.6 million DRF grant submission. The figure illustrates the areas surveyed.

The strategic use of CoastWA funds in the Coastal and Estuarine Risk Mitigation Program (CERMP) submission meant large parts of the WA coastline could be surveyed. DEMs will help develop a better understanding of potential social, environmental and economic exposure, vulnerability and impacts. The capture of this data will be critical to better understand coastal hazards and their impacts. In addition, agencies will be better placed to quantify potential environmental, economic and social losses. and improve the State's emergency land use planning. The data is freely available via the WA Bathymetry Portal which is a self-service downloadable toolset for accessing bathymetric surveys in Western Australia. The program of work completed in 2024-25 is listed in the table.



Capture completed 2024/25

3. Sediment cells identification for the **South Coast**

The project to map the sediment cells along the WA South coast commenced in March 2025. It was funded through CoastWA and a successful DRF grant for \$250,000. There are three phases to the project:

- Phase 1: Development of methods and application to the Naturaliste Region
- Phase 2: Application of approach to remaining four coastal regions along the WA South Coast
- Phase 3: Information dissemination and stakeholder engagement



The five South Coast coastal regions where sediment cell mapping is required

The final project product will be a GIS dataset and a set of technical reports that map sediment cells along the WA South Coast from Cape Naturaliste to the WA/SA border. Workshops will be held to describe the datasets and how they can be applied and used for coastal management.

The CoastWA funded component of the project is due for completion before the end of 2025, however most project deliverables will be finalised and delivered at the completion of all three project phases in early 2027.

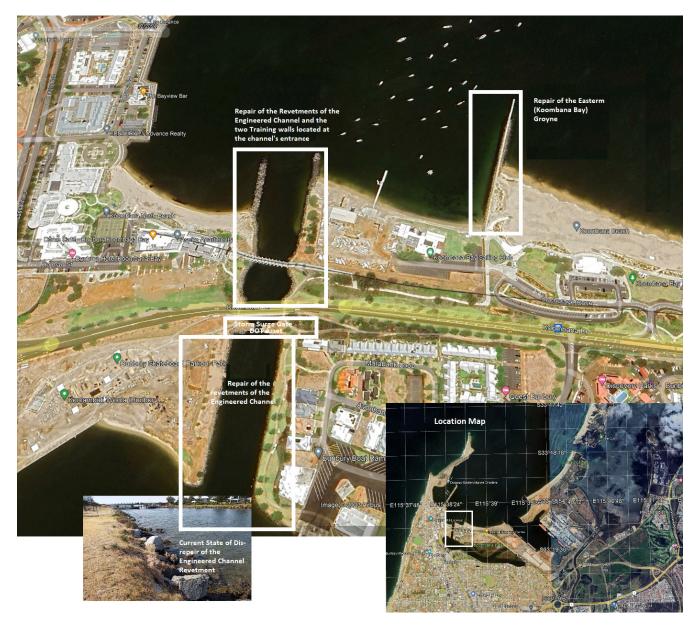
4. Additional applications for Australian **Government funding**

Using the findings from the Statewide Inundation Assessment described in Section B, CoastWA made two additional submissions to the Australian Government's DRF grant program, in 2024 and 2025.

The 2024 submission for Bunbury Storm Surge Barrier Rock Protection Structure Repair was awarded \$3.7 million.

This project commenced in May 2025 to repair the supporting rock protection structures of the Bunbury Storm Surge Barrier (SSB) and the Koombana Bay eastern groyne. This will mitigate the risk of inundation to 2,100 residential buildings and 500 commercial businesses located in the eastern section of the city through the re-engineering of the degraded supporting rock structures. The upgraded design will withstand a 200-year inundation event and extend the operational life of the rock structures to 2076 (50 years). The project is scheduled to be completed in October 2025. The extent of the works program is illustrated in the figure on next page.

The outcome of the 2025 submission for a grant of \$5.8 million to mitigate the risk of seawater inundation of South Carnarvon is expected in late 2025. Carnaryon has been rated to have an extreme risk of seawater inundation within the next 25 years and the town's natural and man-made inundation protection system requires both structures to be upgraded to mitigate this community hazard.



Extent of the Bunbury storm surge barrier project

E. COMMUNITY ENGAGEMENT, TRAINING AND EDUCATION

1. Coastal values survey at coastal erosion hotspots

The University of Western Australia is undertaking a three-year project to develop and implement a program of coastal values surveys at coastal erosion hotspots. The project aims to build an interactive repository of non-market coastal values for use in a variety of studies including coastal adaptation options analyses and CHRMAPs.

In 2024-25 stakeholder workshops and surveys were completed for case studies in Broome, Mandurah (southern beaches), Stirling, Cambridge, Cockburn and Rockingham. Draft repository guidelines have also been developed.

2. Community engagement, training and education strategy

Actions from the *Community Engagement, Training and Education Strategy* (May 2023) are being implemented, with a continued focus on delivering modules as part of the CoastWA Training Series and provision of expert advice and technical assistance to stakeholders and the wider community.

Preparations for the 2025 WA Coastal Forum, and the 2025 WA Coastal Awards for Excellence commenced.

Example of a recorded training session found on the DPLH website

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, nine training modules have been delivered through in-person and online sessions (see Table 1) hosted at WA Local Government Association (WALGA). In 2024-25, three modules were presented between February and May 2025. Across the nine modules, a total of 534 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 wa.gov.au website.





Table 1: CoastWA Training Series schedule

Timing		СМРАР	Status
	1	Coastal processes and how they affect shorelines	Completed
2022-23	2	Coastal protection works	Completed
	3	Benefit Distribution Analysis	Completed
	4	CHRMAP implementation	Completed
2023-24	5	Coastal hazard assessments	Completed
	6	Vulnerability analysis and risk evaluation	Completed
	7	Adaptation options analysis	Completed
2024-25	8	CoastAdapt – How to get the best out of the online tool	Completed
	9	Community and Stakeholder Engagement	Completed

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 their projects. This includes site visits and 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 ad hoc 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.

F. STAFF AND PROGRAM **MANAGEMENT**

1. Staffing

All CoastWA staff positions remained filled for DPLH and DoT as of June 2025.

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 2024-25 the CoastWA Local Government Facilitator:

- Met with the cities of Mandurah, Bunbury and Joondalup and the shires of Jerramungup, Ravensthorpe, Augusta-Margaret River, Dardanup, Gingin, and Esperance. Visits were tailored to suit the needs of the local government, and included meetings with staff, site visits and advice on grant applications.
- Undertook a survey of coastal and estuarine local governments to inform input into development of CoastWA Phase 2, review of SPP 2.6, and guide the activities of the CoastWA Local Government Facilitator. Thirty-six responses were received, and an outcomes report was prepared.
- Hosted an online CoastWA Grants Information Session in February 2025 in partnership with DPLH and DoT. Supported local government grant applications and participated in grant assessment panels.
- In partnership with DoT, DPLH, and in consultation with local governments, developed a framework to guide local governments' thinking and planning for complex adaptation projects including quidance on grant eligibility.

- Supported meetings of the local government CHRMAP Forum in August 2024, December 2024 and April 2025.
- Hosted three modules of the CoastWA Training Series. Two were online and one included a hybrid online session followed by an in-person workshop.
- 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:

- WA Coastal and Marine Network Annual Forum: Coastal and Marine Stewardship in WA: Working Together to Maximise our Collective Impact held on 18 October 2024.
- 5th Australasian Young Coastal Scientists & Engineers Conference, Perth Hub held on the 16-18 October 2024.
- Joint National Coast to Coast and Queensland Coastal Conference held on the Gold Coast, from 4-6 June 2025.



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 the progress and achievements of CoastWA's objectives and targets.

CMAG meetings were held in October 2024, February 2025 and May 2025. Members are provided with presentations, reports and briefings. Key decisions included endorsing a CoastWA 2021-2024 Program Evaluation Report and staffing and budget adjustments.

4.1 Coastal Hazards Working Group and other national partnerships

A key recommendation of the CHWG's report, Towards a National Collaborative Approach to Managing Coastal Hazards in Australia (November 2023), was to develop a national coastal hazards management framework. The framework seeks to build upon existing jurisdictional policy bases, establishing greater strategic relevance and cohesion at the national level for coastal hazard management. CHWG has been successful in receiving funding to deliver the framework.

An Economic Assessment of Coastal Hazards in Western Australia was completed in June 2025. It included six coastal adaptation case studies covering a range of coastal locations, uses and adaptation scenarios.

LOOKING FORWARD

The fifth year of the CoastWA program (2025-26) will see continued implementation of a strategic response to the growing impacts of coastal hazards

As of 1 July 2025, there were 44 active grant projects underway with a total remaining grant commitment of \$2,310,433. For 2025-26, a further 27 projects have been approved and awarded a total of \$3,030,062.50 in grant funding.

Key priorities for 2025-26 are:

- Continue support for coastal land managers to proactively plan and manage the coast.
- Continue the administration of four coastal grants programs to support coastal land managers to prepare, implement and review CHRMAPs.
- Complete five geotechnical surveys to investigate underlying bedrock at specific coastal erosion hotpots.
- Complete investigations and studies to further understand sand and rock supply for coastal adaptation.
- Ongoing development of local coastal monitoring training, including engagement and building data acquisition capacity among coastal Aboriginal rangers.
- Formal review of coastal erosion hotspots and watchspot locations to produce an updated erosion hotspots report.
- Complete sediment cell identification for one region of the South coast (CoastWA funded) and extending this to four additional regions over the next two years (DRF funded).
- Expand the Basic Raw Materials study to cover the remaining regions.

- Finalise of the coastal values project.
- Continue to rollout the CoastWA Training Series.
- Deliver the 2025 WA Coastal Forum, and the 2025 WA Coastal Awards for Excellence in October 2025.
- Continue to support to the Coastal Management Advisory Group and inter-governmental Coastal Hazards Working Group.



Attachment 1: Coastal Management Plan Assistance Program projects completed in 2024-25

Project	Grant recipient	CMPAP approved funding	Coastal manager contribution (cash and in-kind)
Capel – Leschenault Coastal Hazard Risk Management and Adaptation Plan	Peron Naturaliste Partnership	\$160,000	\$164,280
Windy Harbour Coastal Hazard Risk Management and Adaptation Plan	Shire of Manjimup	\$50,000	\$140,000
Hopetoun Coastal Hazard Risk Management and Adaptation Plan	Shire of Ravensthorpe	\$100,000	\$32,459
Mettams Pool Adaptation Options Assessment	City of Stirling	\$70,000	\$55,000
	Total	\$380,000	\$391,739

Attachment 2: Coastwest projects completed in 2024-25

Project	Project partners	Coastwest approved funding	Partner contributions
Pelican Point Sand Drift and Erosion	Shire of Carnarvon	\$33,845	\$33,845
Port Hedland Coastal Wayfinding and Public Art	Town of Port Hedland	\$50,000	\$73,192
Sunset Beach Dune Stabilisation Project Stage 2	City of Geraldton; Batavia Coastcare Network	\$10,000	\$19,028
Floreat main beach coastal dunes Phase 1	Town of Cambridge; Cambridge Coastcare; Perth NRM	\$44,907	\$50,685
Perth NRM's Adopt a Beach Program	Perth NRM	\$55,202	\$268,428
Strengthening the Shoreline: Community Coastal Dune Restoration in South Beach	City of Fremantle; Perth NRM; Friends of Hollis Park	\$30,734	\$47,065
Coastal Capacity Building: Community Action and Advocacy	City of Rockingham; Perth NRM; South Metro Coastcare groups	\$56,496	\$159,545
Understanding and enhancing the biodiversity of a coastal dune system	City of Stirling; Stirling Natural Environment Coastcare; Perth NRM	\$9,705	\$58,980
Intensive Weed Control and Rehabilitation of Joondalup's Foreshore Reserves	City of Joondalup; Friends of North Ocean Reef-Iluka Foreshore; Friends Of Sorrento Beach - Marmion Foreshore	\$30,000	\$92,628
Mullaloo Foreshore Rehabilitation and Resilience	Mullaloo Beach Community Group Inc; City of Joondalup	\$15,000	\$37,990
	Total	\$335,889	\$841,385

Attachment 3: Coastal Adaptation and Protection grant projects completed in 2024-25

Project	Grant recipient	CAP approved funding	Partner contributions
Geographe Bay wave and water level monitoring	City of Busselton	\$11,324	\$11,324
Shoreline Monitoring of Broome Townsite - Year 6	Shire of Broome; and Nyamba Buru Yawuru (NBY)	\$9,012.50	\$9,012.50
Offshore Sand Source Dredge Impact Assessment	City of Wanneroo	\$70,000	\$129,939
Port, Leighton and Mosman Beaches Coastal Monitoring Program - Year 6	City of Fremantle; Town of Mosman Park; and Fremantle Ports	\$33,890	\$56,028.95
Monitoring the Extension of the Wave-Attenuating Engineered Fringing Reef at C.Y. O'Connor Beach	City of Cockburn	\$33,940	\$33,940
Esperance Bay Sand Nourishment	Shire of Esperance	\$100,000	\$146,429.20
Monitoring Coastal Hotspots - Year 4	City of Greater Geraldton	\$21,849.45	\$ 21,849.45
Sand Nourishment - Grace Darling Park to Edward Island Point, Lancelin - Year 4	Shire of Gingin	\$45,000	\$47,600
Six monthly capture of Coastal Surveys (Nedlands to Wanneroo) Year 2	City of Wanneroo - Northern Beaches Alliance	\$80,750	\$88,650
Sand Bypassing Program - Year 6	City of Joondalup	\$123,000	\$124,001
Mettams Pool Beach - Sand Nourishment - Year 3	City of Stirling	\$80,000	\$258,833.56
City Beach Groyne and Vertical Wall Repair	Town of Cambridge	\$200,000	\$477,439.10
Long Term Coastal Monitoring Project	Town of Cottesloe	\$17,703.50	\$17,703.50
	Total	\$826,469.45	\$1,422,750.26

Attachment 4: H-CAP projects completed in 2024-25

Project	Grant recipient	H-CAP approved funding	Partner contributions
Esperance Bay - Castletown Sand Back- Passing Infrastructure	Shire of Esperance	\$950,000	\$509,196
Ocean Beach Adaptation and Revetment	Shire of Denmark	\$1,300,058	\$1,757,339
	Total	\$2,250,058	\$2,266,535