









The Department of Planning, Lands and Heritage and the Western Australian Planning Commission acknowledge the traditional owners and custodians of land and waterways across Western Australia. The Department is committed to reconciliation to improve outcomes for Aboriginal and Torres Strait Islander peoples and to work together to provide a culturally-safe and inclusive environment.

#### Disclaimer

This document has been produced by the Department of Planning, Lands and Heritage on behalf of the Western Australian Planning Commission. Any representation, statement, opinion or advice expressed or implied in this publication is made in good faith and on the basis that the Government, its employees and agents are not liable for any damage or loss whatsoever which may occur as a result of action taken or not taken, as the case may be, in respect of any representation, statement, opinion or advice referred to herein. Professional advice should be obtained before applying the information contained in this document to particular circumstances.

© State of Western Australia

Published by the Western Australian Planning Commission

Gordon Stephenson House 140 William Street Perth WA 6000

Locked Bag 2506 Perth WA 6001

Published January 2023

website: www.wa.gov.au email: info@dplh.wa.gov.au

tel: 08 6551 8002 fax: 08 6551 9001

National Relay Service: 13 36 77

The Department of Planning, Lands and Heritage owns all photography in this document unless otherwise stated.

This document is available in alternative formats on application to the Department of Planning, Lands and Heritage Communications Branch.





Photo courtesy of Town of East Fremantle

The WA coast stretches 20,000 kilometres and approximately 80 per cent of our population lives within 10 kilometres of the coast.

The coast is rich in biodiversity, natural landscapes and Aboriginal cultural and heritage values. The coastal zone is one of the State's most contested spaces. It offers diverse opportunities for recreation, commercial, industrial and residential development. Around 80 per cent of the State's tourism activity also occurs in the coastal zone.

The coast needs careful planning and management. Stewardship of the coastal zone is a shared responsibility between all levels of government, public and private organisations, community groups and individuals.



Ocean Beach, Denmark - Photo courtesy WALGA

## Contents

CoastWA	5	D. Hazard mapping and data acquisition	20	Attachment 1:	
Summary of 2021-22 achievements	6	E. Community engagement, training and education	21	Coastal Management Plan Assistance Program projects completed in 2021-22	30
A. Coastal Grants	10			Attachment 2:	
B. Ground truthing, monitoring and		F. Staff and program management	26	Coastwest projects completed	
inundation hotspots assessment	16	Looking forward	28	in 2021-2022	31
C. Studies and reviews	18			Attachment 3: Coastal Adaptation and Protection grant projects completed in 2021-2022	34

### CoastWA

In 2021 the Western Australian Government's coastal planning and management program was expanded to further support planning, managing and protecting the WA coast from the impacts of coastal hazards.

The Western Australian Planning Commission's Coastal Zone Management Program and Department of Transport's Coastal Adaptation and Protection Program were amalgamated into the new CoastWA Program.

CoastWA addresses the findings and recommendations of the Assessment of Coastal Erosion Hotspots in Western Australia (2019).

CoastWA is a State Government investment of \$33.5 million over five years from 2021-22 to support planning for, managing and protecting the WA coast from the impacts of coastal hazards, to ensure longterm sustainable land use and development.

#### 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/local Government partnership and ensures expertise is available; especially for smaller local

CoastWA is delivered through cooperative arrangements between the Department of Planning, Lands and Heritage (DPLH) and Department of Transport (DoT) and specific grant funding agreements with local governments. The program is overseen by the interagency Coastal Management Advisory Group.



## Summary of 2021-22 achievements

#### A. Coastal Grants

- Monitoring of 97 projects (43 continuing from previous years) across the four grant programs
- Initiation of 54 projects (2021-22 grants round) worth \$7,949,945 supported by \$4,199,219 in grant funding
- Establishment of the CoastWA Local Government Facilitator
- ✓ Completion of 52 projects
- ✓ Total grant payments made of \$3.549.261
- Approval of 50 new projects worth \$9,024,973 to commence in 2022-23, supported by \$3,960,761 in grant funding

#### Coastal Management Plan Assistance Program

- ✓ Initiation of eight projects by coastal local governments for the preparation of coastal hazard risk management and adaptation plans, supported by a total of \$637,750 in grant funding, leveraging \$524,750 in partner contributions (total project value of \$1,162,500)
- Monitoring and steering committee responsibilities for 19 projects (11 continuing from previous years)
- ✓ Completion of 3 projects
- √ \$422,168 in grant payments made
- ✓ CoastWA Local Government Facilitator commenced on 4 October 2021
- ✓ Approval of 6 new projects to commence in 2022-23, supported by a total of \$418,300 in grant funding, leveraging \$368,300 in partner contributions (total project value of \$786,600)
- 22 active projects as of 1 July 2022

#### Coastwest

- ✓ Initiation of 22 projects by land managers and community groups to rehabilitate, restore and enhance coastal sites, supported by a total of \$504,929 in grant funding, leveraging \$926,248 in partner contributions (total project value of \$1,431,177)
- ✓ Monitoring of 43 projects (21 continuing from previous years)
- ✓ Completion of 20 projects
- \$461,004 in grant payments made
- ✓ Approval of 21 new projects to commence in 2022-23, supported by a total of \$592,460.50 in grant funding, leveraging \$1,580,860 in partner contributions (total project value of \$2,173,321)
- 44 active projects as of 1 July 2022

## Coastal Adaptation and Protection (CAP) Grants

- ✓ Initiation of 22 projects by local coastal managers to identify and adapt to coastal hazards, supported by a total of \$1,056,540 in grant funding and underpinning over \$2,230,268 in total project costs
- Project administration and oversight, engineering and technical support, coastal data provision, guidance and advisory responsibilities for 32 projects (10 continuing from 2020-21)
- ✓ Completion of 27 projects
- √ \$1,056,540 in grant payments made
- ✓ Approval of 20 new projects to commence in 2022-23, supported by a total of \$950,000 in grant funding and underpinning \$2,265,052 in total project costs
- ✓ 25 active projects as of 1 July 2022.

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

- ✓ Initiation of 2 projects by local coastal managers to design and implement major coastal adaptation works at WA's coastal erosion hotspots, supported by a total of \$2 million in grant funding and underpinning \$3,126,000 in total project costs
- Project administration and oversight, engineering and technical support, coastal data provision, guidance and advisory responsibilities for 2 projects

- **√** \$1,481,549 in grant payments made
- ✓ Approval of 3 new projects to commence in 2022-23, supported by a total of \$2,343,163 in grant funding and underpinning \$3.8 million in total project costs.



Friends of North Ocean Reef and Iluka Foreshore

## B. Hotspot assessment, ground truthing and monitoring

## Ground truthing including geotechnical investigations for each hotspot

Scoping, procurement, management and completion of Windy Harbour geophysical survey required to progress the Shire of Manjimup's Coastal Hazard Risk Management and Adaptation Plan (CHRMAP).

#### Inundation hotspots assessment

- Scoping, procurement, and management of consultant
- ✓ Completed:
  - 1. local coastal manager consultation
  - 2. review of previous studies and inundation events
  - 3. review of coastal inundation management practices
  - 4. characterisation of coastal flooding hazard
  - 5. review of formulation of a statewide assessment methodology
  - 6. commenced pilot site assessments at three inundation hotspots- Port Hedland, Geraldton and Busselton.

#### C. Studies and reviews

#### Basic raw materials study

Scoping for the study into the demand and availability of basic raw materials for coastal protection.

## Metocean data – two additional offshore wave buovs

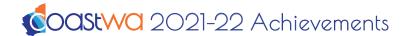
✓ Selection, procurement and set up of 2 offshore wave buoys, including associated instrumentation and processing programs to enable near real-time data transmission for wave height, period, and direction to DoT website and local storage of full spectral data.

## Review coastal erosion hotspot and watchlist locations

Preliminary review undertaken to update data on each hotspot and watchlist location completed, including identification of six potential new (or extended) hotspots.

## D. Community engagement, training and education

- Coastal values project scoping and methodology
- ✓ Community engagement, training and education strategy outline developed
- ✓ Coastal and Marine Community Network website enhancement to increase information access, networking and functionality completed June 2022
- ✓ Sponsorship of the 2022 WA Coastal and NRM Conference, participation on the Strategic and Organising Committees and registration subsidy for 24 local government officers and councillors
- ✓ Organisation of the 2022 WA Coastal Awards for Excellence
- ✓ Local Government Coastal Planning and Management Survey completed January 2022
- ✓ Local Government Coastal Training Survey completed June 2022.



## E. Staff and program management

- ✓ Recruitment of 6 staff to new positions at DoT and DPLH
- Reconvening of the interagency Coastal Management Advisory Group (two meetings held)
- ✓ Provision of internal and external advice on State Planning Policy 2.6: State Coastal Planning Policy
- Leadership of the intergovernmental Coastal Hazards Working Group (two meetings held)
- ✓ Successful submission to
  Infrastructure Australia on the
  need for Australian Government
  funding for coastal erosion hazard
  risk management and adaptation in
  Western Australia. Listed as a new
  proposal on the 2022 Infrastructure
  Priority List
- Development of the State submission for the Australian Government's
   Coastal and Estuarine Risk
   Management grants that resulted in
   WA receiving \$19 million for 8 projects
- Administration of four high priority coastal protection projects with a total of \$5 million funded through the WA Recovery Plan across 2020-21 and 2021-22.

### 2021-22 CoastWA expenditure



Total expenditure of \$4,432,766 across all program elements.



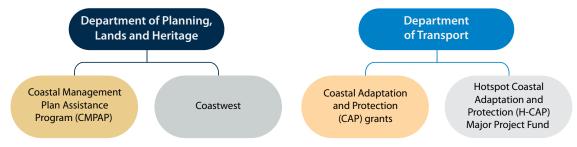
Floreat Beach Dune Restoration - Photo courtesy of Cambridge Coastcare



Binningup Main Beach - Building community capacity and protecting coastal values project, funded by Coastwest - Samantha Pickering

### A. Coastal Grants

Coastal grants comprise 57 per cent of the total CoastWA budget. One of the key priorities for CoastWA in 2021-22, was the administration of grants totalling approximately \$4.47 million to support coastal land managers to plan and manage the coast. The coastal grants consist of four programs, administered by Department of Planning, Lands and Heritage and Department of Transport.

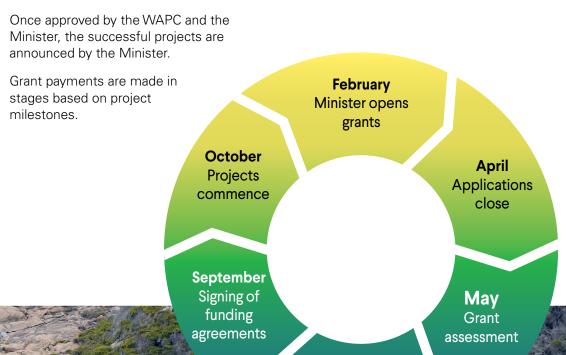


Applications for all grant programs are opened concurrently on an annual basis, announced by the Minister for Transport; Planning; Ports.

Applicant guidelines are reviewed and updated annually, collaboratively between DPLH and DoT.

For CMPAP and Coastwest, applicants are expected to provide at least 50 per cent of the total project value (a combination of financial and in-kind support).

Applications are assessed by Assessment Panels including State and local government representatives.





#### **Coastal Management Plan Assistance Program**

CMPAP was established in 2002 and is administered by the Department of Planning, Lands and Heritage. CMPAP supports State Planning Policy 2.6: State Coastal Planning Policy (SPP2.6) and its implementation, by providing grants to coastal land managers to prepare plans and strategies that:

- i. plan for long-term management of areas that are, or are predicted to become, under pressure from a range of challenges including the impacts of climate change, coastal hazards such as erosion and inundation, population growth and competing land uses; and
- ii. develop community appreciation for the coast as a contested space and facilitate informed community input into local decision making about coastal planning issues.

#### In 2021-22:

- eight projects were initiated totalling \$637,750 in CMPAP funding, leveraging \$524,750 in partner contributions (total project value of \$1,162,500)
- a CoastWA Local Government Facilitator was appointed (commenced 4 October 2021), hosted by the Western Australian

Local Government Association, to provide coastal local governments with dedicated expertise.

- 19 projects (including 11 from previous years) were administered, monitored and had project steering committee involvement
- three foreshore management plan projects were completed (Attachment 1), supported by \$114,398 CMPAP funds and \$134,195 of cash and in-kind contributions from coastal managers

\$550,168 in grant payments were made,

Preparation for 2022-23:

- applications were open 14 February to 4 April 2022
- six grants were approved totalling \$418,300, leveraging \$368,300 in partner contributions (total project value of \$786,600).



Cambridge Coastcare volunteers monitoring erosion at Floreat Beach using a GeoCue Australia LiDAR drone. Photo by Paul McGovern.

#### Coastwest

Coastwest grants, administered by the Department of Planning, Lands and Heritage, support land managers and community organisations to undertake projects to rehabilitate, restore and enhance coastal sites around the State's coastline.

Coastwest grants support the implementation of SPP2.6, which guides coastal planning in WA. The grants reflect the value and significance of coastal foreshores and the important role local governments play in their control, care and maintenance. The grants also recognise the contribution of the WA community and the value of building community capacity to take an active role in coastal planning and management.

#### In 2021-22:

- 22 grants were initiated totalling \$504,929 in Coastwest funding, leveraging \$926,248 in partner contributions (total project value of \$1,431,177)
- 43 projects (including 21 from previous years) were monitored
- 20 projects completed (Attachment 2), supported by \$335,521 in Coastwest funds and \$842,700 of cash and in-kind contributions from project partners
- \$461,004 in Coastwest payments were made.

The completed activities include:

- 14 on-ground projects
- four capacity building projects
- one monitoring project
- one local area planning project
- \$2.51 in proponent contributions leveraged for every Coastwest dollar
- 26 community groups, educational institutions, natural resource management organisations and other not-for-profit organisations participated in projects along with 22 coastal local governments and two state government agencies
- 32,638 seedlings planted
- 456,032m<sup>2</sup> of weeding carried out
- 6,448 metres of fencing installed or repaired to protect vegetation and sensitive areas
- 15,222m<sup>2</sup> of dunes protected by brushing and erosion control
- 1,991 volunteers
- 9,350 volunteer hours valued at \$284,045 (\$30 per hour) (plus \$7,145 in cash)
- 48 days of workshops, training and information sessions
- 291 days of environmental monitoring.

#### Preparation for 2022-23:

- applications were open 14 February to 4 April 2022
- 21 grants were approved totalling \$592,461 in Coastwest funding, leveraging \$1,580,860 in partner contributions (total project value of \$2,173,321).



Students from Yallingup Steiner School helping to remove weeds as part of Nature Conservation Margaret River Region's Adopt a Spot Program

– a project funded by Coastwest

## **Coastal Adaptation** and Protection grants

The Coastal Adaptation and Protection (CAP) grants are managed by the Department of Transport. CAP grants provide financial assistance for local projects that identify and manage coastal hazards. DoT also provides non-financial assistance, such as project administration and oversight, engineering and technical support, coastal data, guidance and advice.

Formerly known as the Coastal Protection Grants, the program (established in 2009) was introduced to:

- (i) reduce the high cost of coastal management for local authorities; and
- (ii) preserve and enhance coastal assets for the general public, building partnerships with local coastal managers, helping them understand and adapt to coastal hazards.

#### In 2021-22:

- 22 projects were initiated, supported by a total of \$1,056,540 in grant funding and underpinning \$2,230,268 in total project costs
- 32 projects were managed (including 10 projects from 2020-21)

- 27 projects were completed (Attachment 3), including:
  - 14 coastal monitoring projects
  - 5 coastal investigation projects
  - 7 coastal adaptation projects
  - 1 coastal maintenance works project
- \$1,056,540 in payments were made.

#### Preparation for 2022-23:

- applications were open 14 February 2022 to 4 April 2022.
- 20 projects were approved, supported by a total of \$950,000 in grant funding and underpinning \$2,265,052 in total project costs.



Granite seawall, Busselton - Photo courtesy WALGA

# Hotspot Coastal Adaptation and Protection Major Project Fund

Due to the significant funding increase for grants under CoastWA, a new grant program, Hotspot Coastal Adaptation and Protection (H-CAP) Major Project Fund has been established in 2021-22. It is administered by DoT on behalf of the WAPC. DoT also provides non-financial assistance, such as project administration and oversight, engineering and technical support, coastal data, guidance and advice.

Only local governments with at least one coastal erosion hotspot and a completed Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) are eligible for H-CAP funding. DoT engage with local governments that have met these criteria, to support them making an application for grant funding.

#### In 2021-22:

- two projects were initiated, supported by a total of \$2,000,000 in grant funding:
  - Rottnest Island Authority with \$1,770,000 for revetment design and construction at South Thomson Bay and underpinning \$3,126,000 in total project costs; and
  - 2. City of Albany with \$230,000 for Emu Point groyne design optimisation.
- \$1,481,549 in payments were made.

#### Preparation for 2022-23:

- invitations were sent to local managers on 14 February 2022 (open to 9 May 2022)
- approval of three projects to commence in 2022-23, supported by a total of \$2,343,163 in grant funding, including underspent carried over:
  - Castletown Beach at Esperance with \$750,000 for a permanent buried pipeline from Bandy Creek Boat Harbour to supply sand to replenish the eroded beach
  - Sunset Beach at Geraldton with \$750,000 for construction of four geotextile groynes and sand replenishment
  - 3. Port Beach at Fremantle with \$843,163 to rebuild sand dunes and the upper beach.



Emu Point, Albany





Cathedral Rock Beach, Windy Harbour

## B. Ground truthing, monitoring and inundation hotspots assessment

This component of the CoastWA Program is led by Department of Transport.

#### **Ground truthing and monitoring**

Ground truthing and monitoring includes geotechnical studies and land surveys. Activities commenced in March 2022, with a site-specific geophysical survey at Windy Harbour, one of the 55 coastal erosion hotspots.

The survey was required to determine the extent, consistency/strength and location of rock along a section of the Windy Harbour coastline and settlement to inform the Shire of Manjimup's CHRMAP. The study was completed in June 2022.

#### **Coastal monitoring program**

The coastal monitoring program was due to commence in 2021-22 but deferred to 2022-23 to enable the inundation assessment to commence. It became evident that inundation information is required to inform funding applications to the Australian Government and was therefore considered a higher priority.

#### **Coastal inundation assessment**

The coastal inundation assessment project was due to commence in 2022-23, however it was brought forward one year. It involves analysing the present and future risk of seawater-caused inundation to state-wide coastal areas. The study will identify pathways to improve existing coastal inundation management within WA and identify areas that contain built assets prone to coastal flooding, that are likely to require active management within the next 25 years.

The identification and pilot hazard assessment commenced in January 2022 and is expected to be completed in January 2023. The tasks completed include consultation with local coastal managers, a review of previous studies and inundation events, a review of coastal inundation management practices and the characterisation of a coastal flooding hazard.

The formulation of a methodology for state-wide assessment is currently under review. Three inundation hotspots (Port Hedland, Geraldton and Busselton) have been chosen to pilot the methodology that can then be applied state-wide to the remaining identified coastal inundation hotspots.







Coastal inundation at Busselton.



Wave buoy, designed to collect metocean data, Department of Transport - Oceanographic Services.

### C. Studies and reviews

This component of the CoastWA Program is led by Department of Transport.

#### Basic raw materials study

The scope for the basic raw materials study for beach renourishment and seawall/groyne construction has been developed and will continue in 2022-23.

#### Metocean data - wave buoys

Metocean data collection is underway.
Currently DoT has eight wave buoys
located at Exmouth, Jurien Bay, Rottnest
Island, Mandurah, Cottesloe, Cape
Naturaliste, Albany, and Esperance. The
information collected supports coastal
engineering projects and provides real
time wave information for mariners and

coastal communities interested local wave conditions. The data is available on DoT's website.

Measured wave data is not currently available between Jurien Bay - Exmouth and Albany - Esperance. To fill this data collection gap, two new offshore wave buoys have been purchased for deployment at Geraldton and Bremer Bay.

# Review of coastal erosion hotspots and watchlist locations

A full review of the hotspot and watchlist locations as identified in the Assessment of Coastal Erosion Hotspots in WA (2019) is scheduled to occur every five years, with the first review scheduled for 2025-26.

In preparation for the full review, and to inform any submissions for Australian Government funding, DoT has undertaken a preliminary review. Since 2019 a range of coastal management activities have taken place along WA's coastline. Many CHRMAPs have been completed, adaptation works implemented and there have been several severe storms.

The aim of this project is to update information for WA's 55 coastal erosion hotspots, identify any new hotspot locations by accurately collating past, current, and upcoming information since 2019, and to evaluate any residual erosion risk following management actions.

#### Assessment of Coastal Erosion Hotspots in Western Australia



For the Department of Transport and Department of Planning, Lands and Heritage

Seashore Engineering Pty Ltd

18 March 2019

Report SE052-01-Rev1

The update has resulted in:

- 11 hotspots have received a major update (20 per cent)
- 18 hotspots have been moderately updated (31 per cent)
- 6 potential new (or extended) hotspot locations have been identified:
  - 1. Surf Beach, Shire of Irwin
  - 2. Yanchep Lagoon, City of Wanneroo
  - 3. South Beach, City of Cockburn
  - 4. Madora Bay, City of Mandurah
  - 5. San Remo, City of Mandurah
  - 6. Myalup Beach, Shire of Harvey.



D. Hazard mapping and data acquisition

This component of the CoastWA Program is scheduled to commence in 2022-23 and will be led by Department of Transport.



Output from LiDAR bathymetry survey of Geraldton by Fugro, 2016



Western Australian State NRM and Coastal Conference 2022, Mandurah – Photo by Overland Media

## E. Community engagement, training and education

This component of the CoastWA Program is being led by Department of Planning, Lands and Heritage.

## Coastal values survey at coastal erosion hotspots

The University of Western Australia was contracted to develop a project scope including methodology and a delivery program outlining how a coastal values survey at coastal erosion hotspots can be implemented over the next four years.

The project is being overseen by a project reference group comprising DPLH, DoT and WALGA.

This project will support implementation of the CHRMAP Guidelines Appendix 5 Non-market valuation instruments for measuring community values affected by coastal hazards at coastal erosion hotspots.

Work completed includes criteria for prioritising hotspots for valuation, a shortlist of hotspots, a scope of work to develop a repository of non-market values which can be used for benefit transfer, a scope of work to deliver a training and utilisation package and a schedule of activities.

### Community Engagement, Training and Education Strategy

The Community Engagement, Training and Education Strategy aims to prepare and deliver an education and training program to increase the understanding of CHRMAP. Its objectives are to:

 increase awareness of coastal hazards, future impacts and coastal adaptation measures

- build the capacity of coastal decisionmakers by increasing their understanding of coastal processes and CHRMAP
- build community understanding of coastal processes and CHRMAP to facilitate informed discussions
- improve community and stakeholder engagement when developing CHRMAP including understanding of all risk management pathways
- increase awareness of CoastWA and its grants programs and projects.

A range of education and training program activities have been identified. In 2021-22 activities included:

- a contract with the Coastal and Marine Community Network (CMCN) to enhance its website to increase information access and networking. Functionality was completed in June 2022
- sponsorship of the WA State NRM and Coastal Conference
- the WA Coastal Awards for Excellence
- promotion of the CoastWA Program online (such as WALGA Enviro-News, WA Coastal News) and in-person presentations as occasions arise.

Www.stirling.wa.gov.au

City of Stirling CHRMAP community engagement pop up session – Photo by Element

## Training and up-skilling of local coastal managers

A CoastWA Local Government Facilitator funded by CoastWA and based at WALGA commenced in October 2021. The Facilitator provides support for training and up-skilling local coastal managers and supports local governments to develop and implement CHRMAPs and access CoastWA funding.



In November 2021 the CoastWA Local Government Facilitator coordinated a survey of local governments to improve understanding of the challenges and barriers of CHRMAPs. The survey found that CHRMAPs are assisting local governments to better manage current and future coastal hazards and that resources currently available to local governments are helpful.

Based on key findings, eight recommendations have been identified that would further support and assist local governments to develop and implement CHRMAPs:

- local government funding to develop and implement CHRMAPs should continue to be provided through CoastWA
- 2. investigate/advocate for the development of a long-term equitable, effective, and sustainable funding solution
- 3. investigate opportunities to increase local government staff resourcing to develop and implement CHRMAPs
- 4. develop a training program for local government officers involved in coastal hazard risk management and adaptation planning

- resources such as guidelines, templates and case studies should be focused on the latter stages of development and implementation of CHRMAPs
- WALGA should continue to support local governments through the Local Government CHRMAP Forum and advocacy to State and Federal Governments
- community education should focus on improving awareness and understanding of the broader impacts and potential costs of coastal adaptation measures
- areas of coastal erosion and inundation identified in the survey should be used to inform future updates of hotspots reports.

In June 2022 WALGA conducted a short follow-up survey of local government to better understand their CHRMAP training needs. Results from the survey will be used to help shape the content of the Local Government Training Program.

A CoastWA Grants Information Session for local government was held in March 2022.

## WA State NRM and Coastal Conference

Through the Coastwest program, the WAPC supports the WA State Coastal Conference, facilitating the process for selecting the conference host and providing financial sponsorship. The conference is a biennial event, providing a forum for land and coastal managers, community members, researchers, planners and a range of professionals to exchange knowledge, experiences and new thinking about restoration, management, science, policy, governance, and advocacy.

In March 2021, the City of Mandurah in partnership with the Shires of Murray and Waroona was awarded hosting of the 2022 WA State NRM and Coastal Conference. The conference, titled Building Resilience Through Innovation, was held in Mandurah 19-21 September 2022. A DPLH representative participates on the conference's Strategic and Organising Committee. Gold Sponsorship was provided from the CoastWA budget.

CoastWA supported 24 local government officers and elected members to attend and participate in the 2022 WA State NRM and Coastal Conference.







Photos by Overland Media

## WA Coastal Awards for Excellence

The WA Coastal Awards for Excellence are coordinated by DPLH on behalf of the WAPC. The awards, held every two years from 2003 to 2019 in conjunction with the WA State Coastal Conference, recognise individuals, community groups, schools, local and State Government agencies and non-government organisations for their outstanding commitment to planning, protecting and managing WA's coast. Many of the projects nominated for an award have received funding from CMPAP, Coastwest or a CAP grant.

The Minister for Planning announced the 2022 award nomination period on 5 May 2022. The award categories were:

- 1. Coastal Champion
- 2. Coastal Planning
- 3. Coastal Management and Adaptation
- 4. Education and Engagement
- 5. Coastal Design
- 6. Science and Research

A panel of judges consisting of members from WAPC, DPLH, DoT, Perth Region NRM, WA Coastal and Marine Community Network, University of Western Australia, WALGA and the Office of the Government Architect selected the winners. Winners were announced at the opening event of the WA State NRM and Coastal Conference in Mandurah on 19 September 2022.





WA Coastal Awards for Excellence winners 2022



WA Recovery Plan coastal protection project, dredging and sand nourishment at Port Beach - Department of Transport (Maritime).

## F. Staff and program management

#### **Staff**

In 2021-22 the following staff were recruited to deliver and implement CoastWA:

- two Coastal Engineer Project Managers
- Oceanographer Program Leader
- Senior Coastal Engineer
- two Principal Policy Planners

#### Program management – Coastal Management Advisory Group

CoastWA is overseen by the Coastal Management Advisory Group (CMAG). CMAG was established to oversee a whole-of-government approach to the provision of integrated advice on the management of coastal erosion and inundation.

As CoastWA is an across-government program, CMAG was identified as the most appropriate body to provide overarching governance for delivery of CoastWA, monitor its progress, and to ensure objectives and targets are met.

Following the establishment of the CoastWA program, CMAG reconvened in February 2022. Meetings were held on 8 February 2022 and 24 May 2022.

#### **Policy advice**

Engagement with stakeholders is key to educating and promoting wide-spread understanding of SPP2.6 and assisting with its implementation. Coastal policy advice is provided to many stakeholders including the Minister, local government and in response to media enquiries.

## Coastal Hazards Working Group and other national partnerships

DPLH chairs the intergovernmental Coastal Hazards Working Group (CHWG) which comprises all States and Territories, the Australian Local Government Association and the Australian Government. Its role is to collate existing information to provide a national picture and explore and recommend options for a more collaborative approach to coastal erosion that will build resilience to coastal hazards. CHWG met twice in 2021-22 on 5 August 2021 and 16 February 2022. Its draft report was completed in September 2021 with minor updates in January 2022.

In September 2021, DPLH with the support of Infrastructure WA, made a Stage 1 submission to Infrastructure Australia (IA) regarding the need for Australian Government funding for coastal erosion hazard risk management and adaptation in Western Australia.

The proposal is a program of coastal erosion hotspot management and adaptation actions drawn from local government adopted coastal hazard risk management and adaptation plans. It builds the case and includes what could be done and a rough cost estimate. In June 2022 the WA Coastal Hazards Adaptation Program was added to the IA 2022 Infrastructure Priority List.

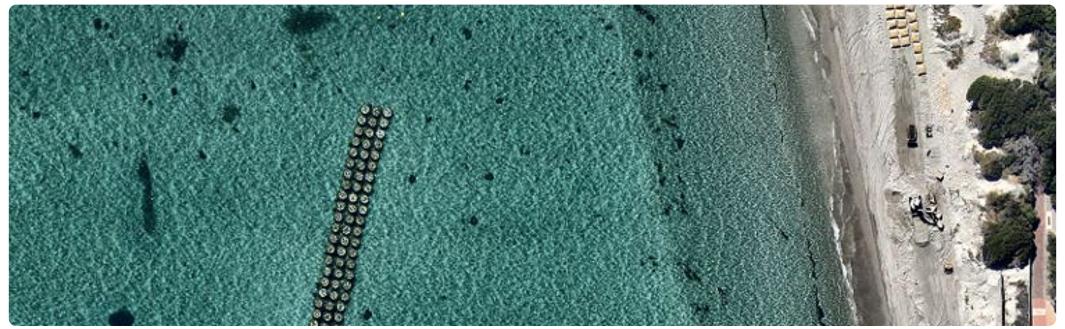
In February 2022, the Australian Government announced the one-year Coastal and Estuarine Risk Mitigation Program with grant funding of \$50 million nationally for projects up to \$10 million to address the ongoing challenge of increasing coastal hazards. A State submission comprising 13 projects was submitted in June 2022. CoastWA funding and in-kind support from DPLH and DoT is being used to secure the requisite minimum 25 per cent State/proponent contribution to total project cost<sup>1</sup>.

## WA Recovery Plan coastal protection projects

DoT administered four high priority coastal protection projects, with total of \$5 million funded through the WA Recovery Plan across 2020-21 and 2021-22. These included:

- 1. City of Fremantle with \$3,250,000 for a large-scale sand nourishment project at Port Beach
- 2. City of Rockingham with \$650,000 for sand management and spur groyne refurbishment construction works at Cape Peron
- 3. City of Greater Geraldton with \$600,000 for revetment repair to the John Batten Community Hall revetment at Drummond Cove
- 4. City of Wanneroo with \$500,000 for groyne upgrade at Quinns Beach.

<sup>&</sup>lt;sup>1</sup> In November 2022, WA was awarded \$19 million for eight projects



Engineered Fringing Reef installed near the CY O'Conner, designed to generate wave breaking and reduce coastal erosion. Source: Nearmap. Image taken April 2022.

## Looking forward

CoastWA will continue to implement a strategic response to the growing impacts of coastal hazards, providing an efficient use of limited funds and expertise for the effective delivery of priority projects. These projects plan for, manage and protect the WA coast from the impacts of coastal hazards to ensure sustainable land use and development on the coast for the long-term.

At the commencement of 2022-23, there were 97 active grant projects with a total grant commitment of \$4,747,169. This comprises \$786,408 for 47 ongoing projects and \$3,960,761 for 50 new projects to commence in 2022-23.

Key activities for 2022-23 are:

- supporting coastal land managers to proactively plan and manage the coast
- administration of coastal grants across four programs to support coastal land managers to prepare and implement coastal hazard risk management and adaptation plans

- identification and assessment of inundation hotspots
- geotechnical investigations for erosion hotspots with high dunes as requested by local coastal managers based on their completed CHRMAP
- initiation of basic raw materials study for beach renourishment and seawall/groyne construction
- hazard mapping and acquisition of bathymetric LiDAR for the south coast and capes region.
- continuing to provide services to the intergovernmental CHWG; progressing its report and recommendations, including ongoing national collaboration to develop a National Coastal Hazards Adaptation Strategy and associated national funding program
- working with Infrastructure WA to develop a Stage 2 State funding submission to Infrastructure Australia for coastal erosion hazard risk management and adaptation in Western Australia
- working with the Department of Fire and Emergency Services to access Australian Government funding thorough the Disaster Ready Fund for coastal hazards risk management and adaptation in WA.
- development and rollout of an education and training program to increase the understanding of coastal processes and CHRMAP.



Emu Beach Albany - Photo courtesy WALGA



Esperance Duke's Tjaltjraak Boodja Park Dunes Coastal Restoration and Sustainable Recreation Project – Funded by Coastwest – Photo courtesy Katherine Walkerden (Shire of Esperance)

### **Attachment 1: Coastal Management Plan Assistance Program projects completed in 2021-22**

Project	Coastal Manager	CMPAP funding approved	Coastal Manager contribution
Irwin Coastal Management Plan	Shire of Irwin	\$40,000	\$36,835
Preston Beach Foreshore Management Plan	Shire of Waroona	\$30,000	\$30,578
Emu Beach Foreshore Management Plan	City of Albany	\$44,398	\$66,782
TOTAL		\$114,398	\$134,195

### Attachment 2: Coastwest projects completed in 2021-2022

Project	Project Partners	Coastwest approved funding	Partner contributions
Walsh Point Visitor Management Master Plan	Wunambal Gaambera Aboriginal Corporation Kandiwal Aboriginal Corporation	\$24,500	25,200
Separation Point Coastal Dune Management	City of Greater Geraldton Central Regional TAFE	\$16,900	\$18,150
Building community capacity in the Northern Agricultural Region	Northern Agricultural Catchments Council Shire of Gingin Shire of Dandaragan Shire of Coorow Coastcare groups (10)	\$19,400	\$31,700
Rehabilitation C.Y. O'Connor Beach	City of Cockburn Cockburn Coastcare Group Perth NRM	\$6,692	\$7,090
Floreat Beach Dune Restoration	Cambridge Coastcare Inc Town of Cambridge	\$10,590	\$21,990
Cottesloe Foreshore Dune S12 Restoration Project	Town of Cottesloe Cottesloe Coastcare Association Schools and corporate groups	\$7,126	\$19,339
Conservation, Restoration, Education  – Bush Forever 325 Iluka Foreshore	Friends of North Ocean Reef-Iluka Foreshore City of Joondalup	\$16,780	\$19,300
Mullaloo Foreshore Rehabilitation 2020-21	Mullaloo Beach Community Group Inc City of Joondalup	\$25,400	\$65,400

Attachment 2: Coastwest projects completed in 2021-2022 continued

Project	Project Partners	Coastwest approved funding	Partner contributions
Bicton Foreshore Reclamation Project	City of Melville Bicton Environmental Action Group Department of Biodiversity, Conservation and Attractions	\$13,705	\$18,434
Integrated Foreshore Restoration in City of Stirling and Trigg Scarborough Coast Stage 2	Stirling Natural Environmental Coastcare Inc City of Stirling Perth NRM	\$49,945	\$82,810
Coastal Capacity Building in the Perth Region	Perth NRM All Coastcare and Friends of groups in Perth All coastal local governments in Perth	\$19,400	\$102,465
Preston Beach Foreshore Restoration	Shire of Waroona	\$10,000	\$7,690
Strategic protection of the iconic Prevelly/ Gnarabup coast	Shire of Augusta-Margaret River Margaret River Coastal Residents Association Nature Conservation Margaret River Region	\$10,055	\$30,675
Binningup Main Beach - building community capacity and protecting coastal values	Shire of Harvey Binningup Coastcare and Environmental Group	\$7,451	\$4,910
Coastswap Support and Summer Activities Program	South West Catchment Council Peel Harvey Catchment Council South Coast NRM 10 local governments Department of Biodiversity, Conservation and Attractions	\$10,000	\$27,320

Attachment 2: Coastwest projects completed in 2021-2022 continued

Project	Project Partners	Coastwest approved funding	Partner contributions
Protecting the Cultural and Ecological Values of Taalinup Boya	Undalup Association Shire of Augusta-Margaret River Centre of Excellence in Natural Resource Management Applied Archaeology Australia Augusta Coast and Landcare Group	\$22,940	\$52,840
Albany Senior High School Marine Science project	Albany Senior High School  Department of Primary Industry and Regional Development  Edith Cowan University	\$5,000	\$80,798
Protecting the Duke's Dunes - Coastal Restoration and Sustainable Recreation	Shire of Esperance Esperance Tjaltjraak Native Title Aboriginal Corporation Work for the Dole Team Condingup Primary School Orleans Bay Caravan Park Esperance Men in Sheds	\$39,437	\$204,902
WA Coastal News	Australian Coastal Society	\$12,000	\$13,487
Two Rocks Sea Wrack Management	City of Wanneroo Two Rocks Yanchep Residents Association Department of Transport	\$8,200	\$8,200
TOTAL		\$335,521	\$842,700

### **Attachment 3: Coastal Adaptation and Protection grant projects completed in 2021-2022**

Recipient	Project	CAP approved funding (\$)
Shire of Broome	Cable Beach protection detailed design	68,988
Shire of Broome and Nyamba Buru Yawuru	Shoreline monitoring of Broome townsite Program	12,500
Town of Port Hedland	Protecting Hedland - Coastal Seawalls Project - West End	227,453
City of Greater Geraldton	Monitoring coastal hotspots	19,000
Shire of Gingin	Interim adaptation solution for managing erosion at Lancelin	31,000
Shire of Gingin	Condition Assessment of Ledge Point & Guilderton Groynes	13,450
Shire of Gingin	Gingin Hotspots Coastal Monitoring Project	19,835
City of Cockburn	C.Y. O'Connor Beach engineered fringing reef	214,349
City of Fremantle	Port Beach Coastal Adaptation Detailed Design Report	13,386
City of Fremantle and Town of Mosman Park	Port, Leighton and Mosman Beaches Coastal Monitoring Program – 2020/2021 data collection	18,750
City of Joondalup	Coastal monitoring program 2021-22	24,908
City of Joondalup	Sand bypassing program 2021-22	89,800
City of Wanneroo	Aerial coastal survey of beaches and coastal structures	22,905
City of Wanneroo	Installation of remote monitoring cameras for ongoing coastal monitoring	12,500
City of Wanneroo	Beach Renourishment Sand Sourcing Feasibility Study	20,000
Rottnest Island Authority	Coastal Hazard Risk Management and Adaptation Plan (CHRMAP)	25,000
Shire of Murray	Coastal Hazard Risk Management and Adaptation Plan (CHRMAP)	50,000
City of Bunbury	Maintenance of Leschenault Inlet inner training walls	20,000
City of Busselton	Coastal monitoring (year 9)	45,000
City of Busselton	Mitigation of coastal flooding	25,000
City of Busselton	Sand nourishment	50,000
Peron Naturaliste Partnership	Beach profile surveys and sediment sampling	15,300
Peron Naturaliste Partnership	Regional Coastal Monitoring Program - review and analysis	30,000
Shire of Augusta Margaret River	Gnarabup Beach sand nourishment	15,000
Shire of Augusta Margaret River	Geophysical assessment – Augusta South	25,000
Shire of Denmark	Ocean Beach retaining wall maintenance and refurbishment	55,775
Shire of Esperance	Esperance Bay Coordinated Dredging and Sand Back Passing Trial	300,000
TOTAL		\$1,464,899

