CoastAdapt

NCCARF
National
Climate Change Adaptation
Research Facility

Australian Government
Department of the Environment and Energy

CoastAdapt-*Beta*

A tool to help Australian decision makers understand climate change and sea level rise risks, and plan for adaptation

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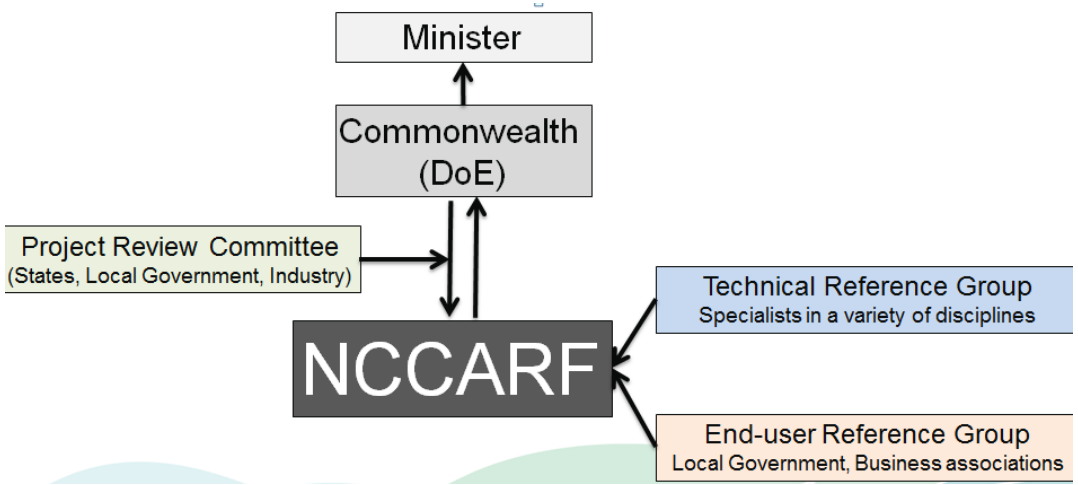
Demand driven development

Understanding user needs through consultation

- 700 stakeholders around Australia (all states and territories)
  - 400 face to face
  - 300 online survey

- Broad ranging
  - Government (Local, State, Commonwealth)
  - Business and Industry
  - NRM
  - Community groups
  - Academics

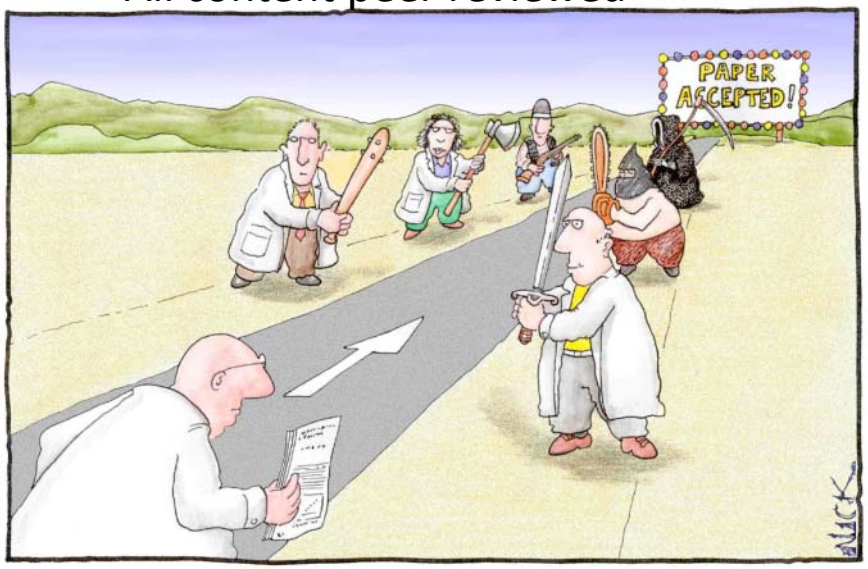
Authoritative



64 authors
41 technical reviewers
End-user review of every document

(Tool Development Partners
Tool Implementation Partners)

All content peer reviewed



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

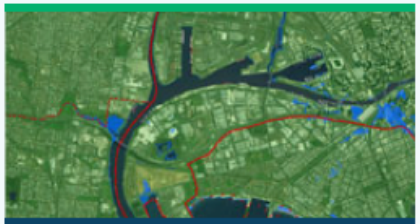
Learn about climate change

Assess risks and impacts

Understand adaptation

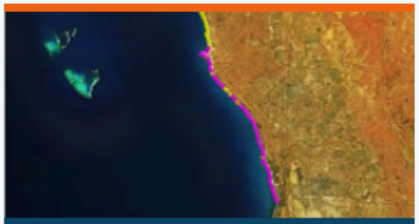
Undertake adaptation

Connect with the adaptation community



Sea-level rise and you

Select your local area to view future sea-level rise information



Shoreline Explorer

Use an interactive map to discover more about your current coastline

Coastal Climate Adaptation Decision Support

Coast Exchange

CoastExchange

Get your questions answered in CoastAdapt's online discussion forum

Infographics

A picture says a thousand words

Case studies

Learning by sharing: case studies of adaptation in Australia and beyond

Information manuals

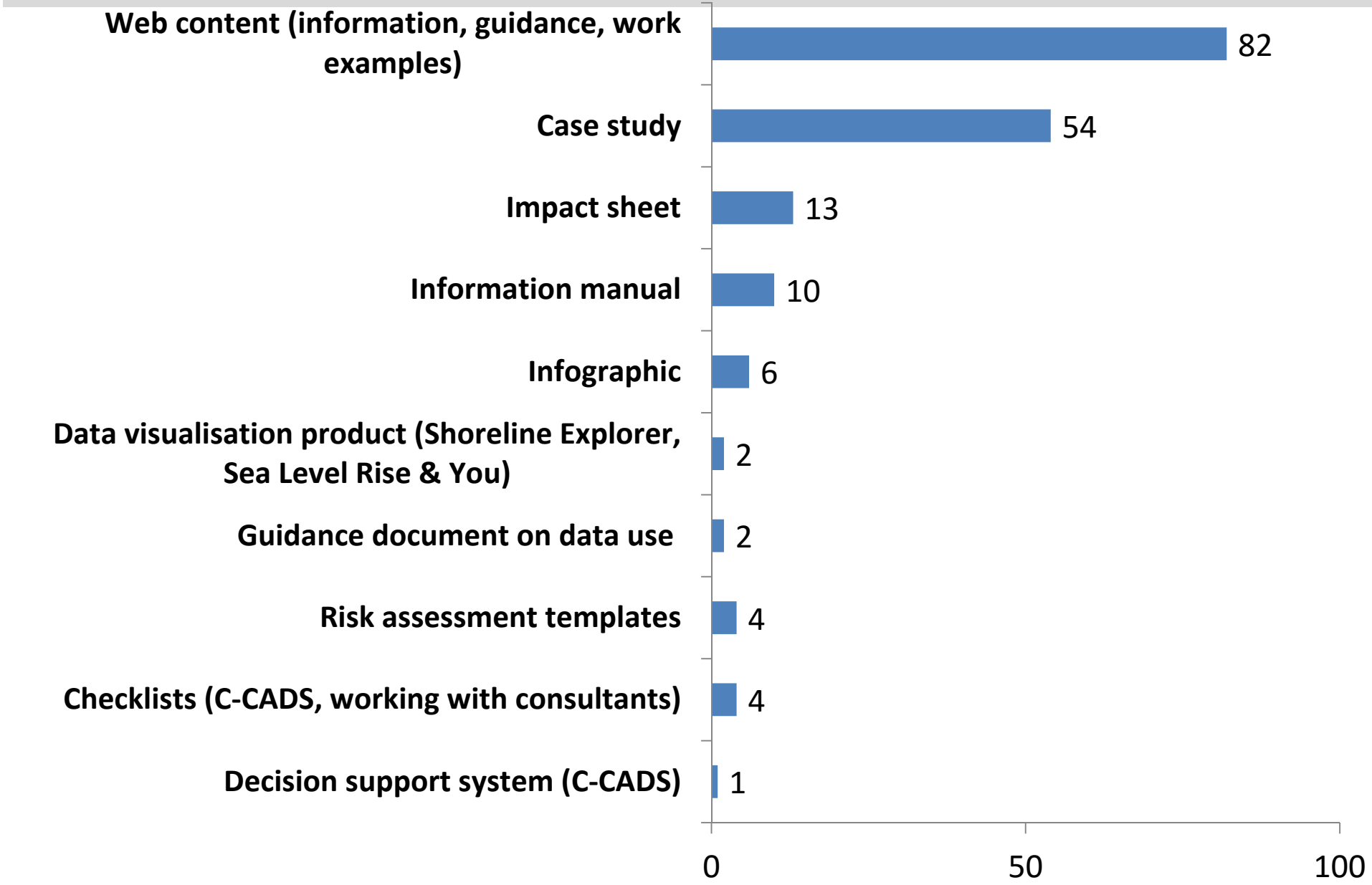
Ten in-depth studies of key adaptation topics of concern to coastal managers

Impact sheets

Thirteen sector-wise studies of climate change impacts in coastal Australia

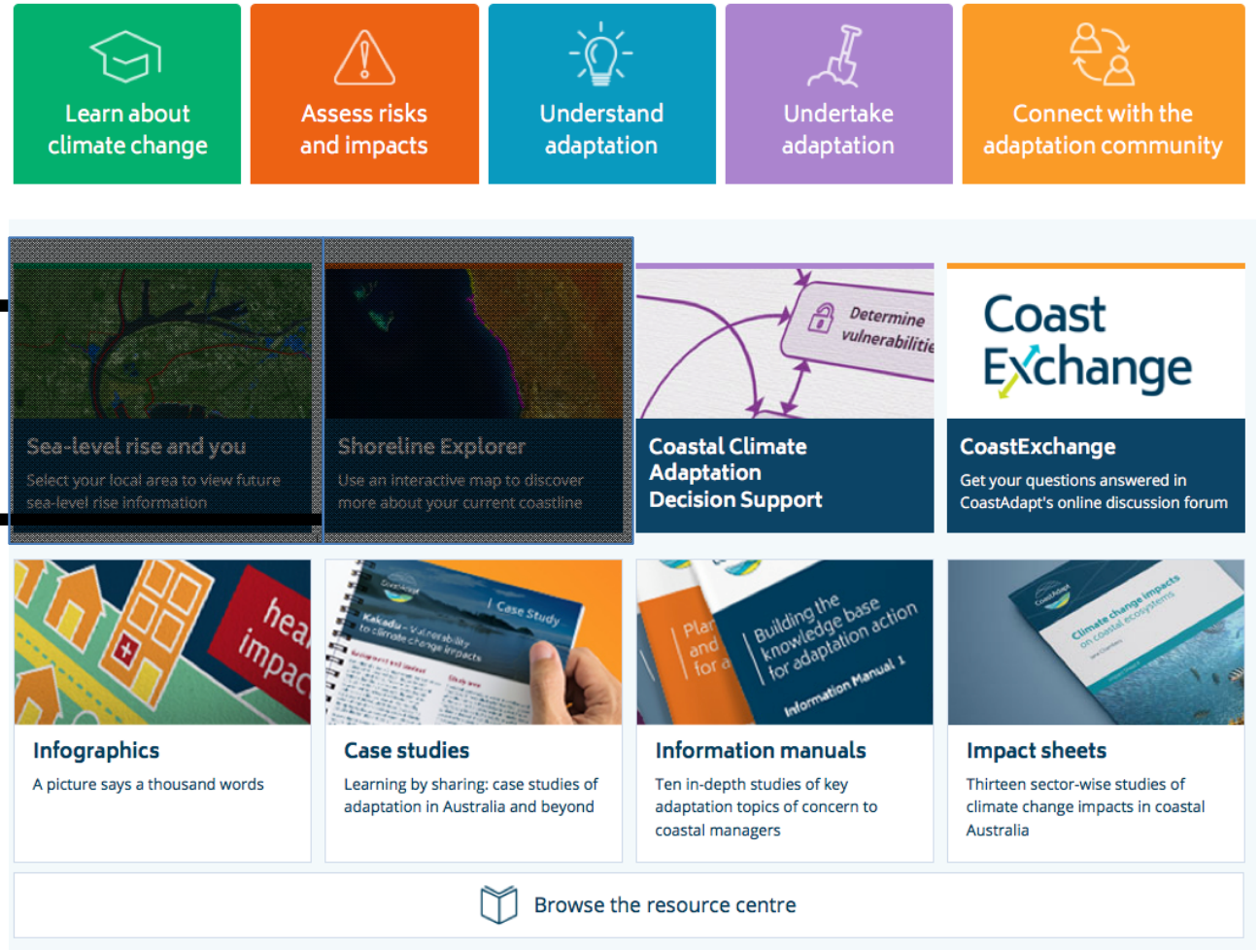
Browse the resource centre

What's in CoastAdapt?



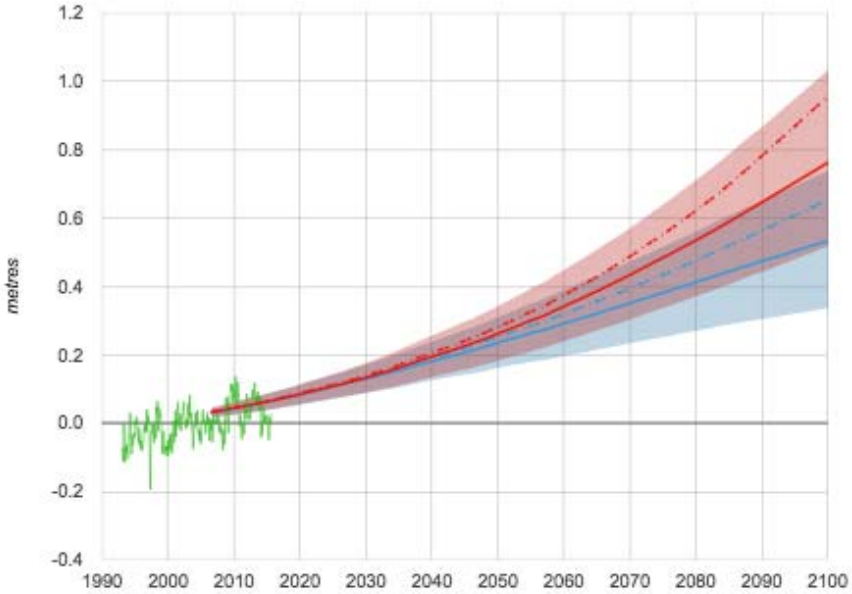
What's in CoastAdapt?

Two data and visualization products



Sea-level rise and you

Select your local area to view future sea-level rise information



Cairns

- RCP8.5 scenario
- RCP6.0 scenario
- RCP4.5 scenario
- RCP2.6 scenario
- Satellite data

Solid lines show median sea-level rise relative to an average from 1986 to 2005

Dashed lines show allowances for each scenario

Shaded areas show the *likely* range for each scenario (5 to 95% confidence limits)

View guidance information

Sea-level rise

(relative to an average calculated between 1986 and 2005)

Date (unit)	RCP2.6	RCP4.5	RCP6.0	RCP8.5
2030 (m)	0.13 (0.09-0.17)	0.13 (0.09-0.18)	0.13 (0.08-0.17)	0.14 (0.09-0.18)
2050 (m)	0.22 (0.15-0.30)	0.24 (0.16-0.32)	0.23 (0.15-0.30)	0.27 (0.19-0.35)
2070 (m)	0.31 (0.20-0.43)	0.35 (0.24-0.48)	0.35 (0.23-0.46)	0.44 (0.31-0.58)
2090 (m)	0.40 (0.24-0.56)	0.48 (0.31-0.66)	0.49 (0.32-0.66)	0.65 (0.45-0.88)
Rate of change at 2100 (mm/yr)	4.3 (1.6-6.8)	6.0 (3.2-8.8)	7.5 (4.6-10.6)	11.5 (7.4-16.3)

Allowances

(relative to an average calculated between 1986 and 2005)

Date (unit)	RCP2.6	RCP4.5	RCP6.0	RCP8.5
2030 (m)	0.14	0.14	0.13	0.14
2050 (m)	0.24	0.26	0.24	0.29
2070 (m)	0.35	0.40	0.39	0.49
2090 (m)	0.48	0.57	0.58	0.79

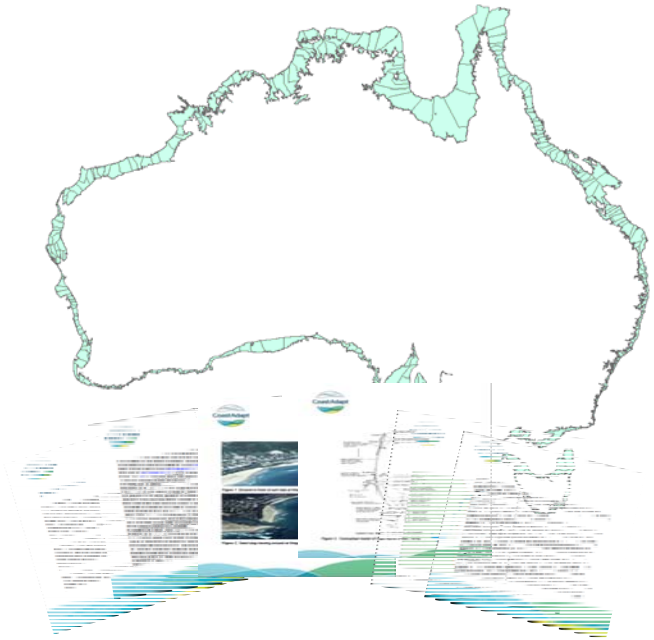
Inundation maps

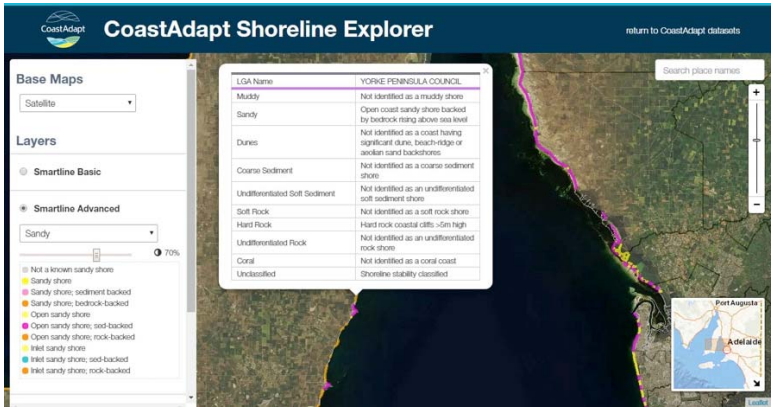
2100 RCP8.5 PDF 9MB

2050 RCP8.5 PDF 9MB

2100 RCP4.5 PDF 9MB

- Sediment compartments
- Smartline – a visualisation tool that identifies coastal areas susceptible to erosion
- Water observations from space: historical surface water observations allowing users to distinguish between permanent water bodies and areas prone to flooding





Web content


How to access climate change scenarios
How to understand climate change scenarios
How to conduct a climate change risk assessment
Getting buy-in and support in your organisation
What is the least I can do for adaptation?
Valuation of adaptation options relative to the avoided impacts
Financial and funding mechanisms for adaptation to climate change
Reducing the risk of a legal challenge
Working with consultants
Connect with the adaptation community
Coastal Climate Adaptation Decision Support
CoastExchange
Coast Exchange
82 web contents
At a glance
Main text
Introduction
Why should climate ch
Also in CoastAdapt
Sea-level rise information fo
Australian coastal councils
Read more...
Climate Change Adaptation
Decision Support (C-CADS)
C-CADS has been developed and t
to support coastal adaptation dec
makers in Australia.
Read more...
On this page
At a glance
How to use these resources
Print
Save
hide
Box 1: Resources in CoastAdapt to support organisations

Checklists

Step 1 Checklist: Identify challenges

Have you considered what you are legally required to do regarding cli
jurisdiction? See *Information Manual 6: Legal risk*.

Have you accessed the Climate Change in Australia website to identify
relevant to your local area?

www.coastadapt.com.au

Have you accessed the CoastAdapt datasets on potential local *sea leve*
and on the susceptibility of your *coastal compartments* to change?

Are there datasets or maps provided by the State Government, or in t
(www.coastalrisk.com.au), which show coastal hazards in your region?
available datasets see CoastAdapt's *Information Manual 3: Available d*

Has your local area been affected by catchment flooding, sea inundati
bushfires in the past? See Water observations from space in *Shoreline Explorer*.

Have you accessed any additional local data and knowledge on climate change that may be available in your local area (local government, universities, NRM groups)? See *Current climate data sources*, *Data for risk assessment*.

Have you considered accessing local knowledge on climate changes from long-term residents and Traditional Owners?

Does your organisation have established engagement mechanisms for the place you will be focusing on? See *Information Manual 9: Community engagement*.

Step 2 Checklist: Determine risks and vulnerabilities

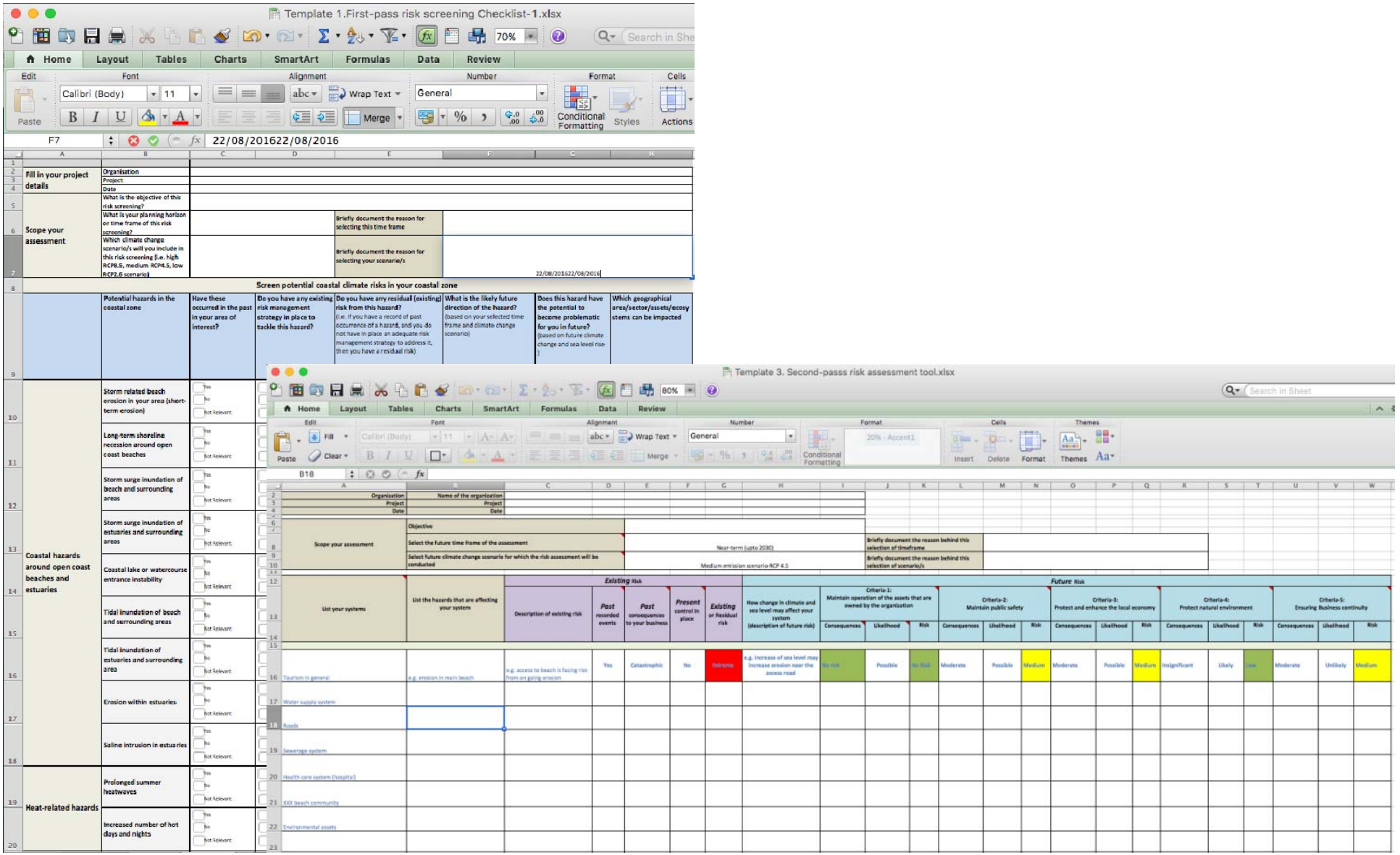
Template 1: Designing the Project Brief for Hiring Consultants

Performance Criteria	Rating					Considerations
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	
The project aims, objectives and expected deliverables are clearly stated in the brief						• Did the Client seek input to check that project aims, objectives and deliverables are clear in the brief?
Staff from all relevant departments, partner organisations, government agencies, and / or community representatives were involved in developing the brief.						• Were a range of the Client organisation's staff involved in developing the project brief, to build a clear set of aims, objectives and expected deliverables? This should include staff from various departments (e.g. asset management, land use planning, finance, governance, environment and sustainability). • Were relevant external government agencies consulted when developing the brief? This will be important where the government agencies are providing financial assistance or may be expected to assist in implementing the project's outcomes. • Did the Client consider consulting with key community groups / persons, to capture relevant community concerns in the brief? • Were peer networks, colleagues etc with experience in climate change and adaptation projects consulted, to ensure the aims, deliverables etc. are adequate for such projects? • The Client could consider establishing a Project Working Group, consisting of key staff from the Client's organisation, partner organisations, government agencies, and / or community groups as required.
The scope of works is designed to allow flexibility and adaptability, should elements change during the course of the project. This is essential given the uncertainty associated with climate change science and adaptation planning. NB – the scope of works needs to be clear, but the methodology to achieve this can be left to the consultant, to demonstrate best practise or leading methodologies to achieve the scope within the budget.						• Did the Client consider or include any of the following methods to introduce flexibility and adaptability into the project brief, particularly given the uncertainty associated with climate change and adaptation projects? o Pursuing a pilot project first, before designing a larger scope project; o Specifying hold points with milestones, to be approved before undertaking the next stage; o Breaking the project into smaller pieces that are undertaken individually. This would require a separate procurement process for each piece of work; or setting up a Panel of Providers of suitable consultants (see below); o Set up a "Panel of Providers" of suitable consultants, via an initial expression of interest to check qualifications, experience and expertise, then engaging consultants (singly or to work together) as required for stages / segments of the project; o Working to an upper limiting fee, to allow you and consultant to respond to changes as they arise during the project o Separating the project area into smaller prioritised areas; o Pursuing a data collation and review project, prior to designing the main project.
The reporting requirements and intended audiences of the deliverables are clear (including reporting, presentations and other deliverables, and attitudes of local community and client's organisation towards climate change science and adaptation planning).						• Aside from key deliverables, a key acceptance criterion will be the quality of any reporting or presentations derived from the project. Have the expected audience for these deliverables been clearly outlined in the brief? For example, the brief may require the main report to be succinct and easily understood by the layperson, to have an executive summary, and technical details to be included in appendices. • Has the client considered the organisation and community's attitudes towards climate change and adaptation projects when designing the deliverables?
The expectations and criteria for successful stakeholder and community engagement are outlined clearly (e.g. required outcomes from consultation, list of groups to be consulted, etc.)						
Details to be provided by the Consultant to demonstrate their competency are clearly requested, including: • Examples of recent projects demonstrating up-to-date technical competence and knowledge in climate change / adaptation science, local area knowledge, statutory context knowledge, community engagement skills and /or verbal / written communication skills; • Qualifications and contacts for key staff; and • Referees for recent projects.						
The brief clearly states the officer from the Client's organisation who will lead the project.						
Details for progress meetings (number, timing, format) and / or progress updates is stated in the project brief; or otherwise, the Consultant has been requested to detail progress meetings (number, timing, format) and progress updates (timing, format) in their submission.						
Internal workshops, presentations or other activities to build the capacity and aptitude for climate change science and adaptation planning within the client's organisation are requested in the scope of works in the project brief.						

Box 4: Questions to support self-assessment of existing climate change adaptation plans

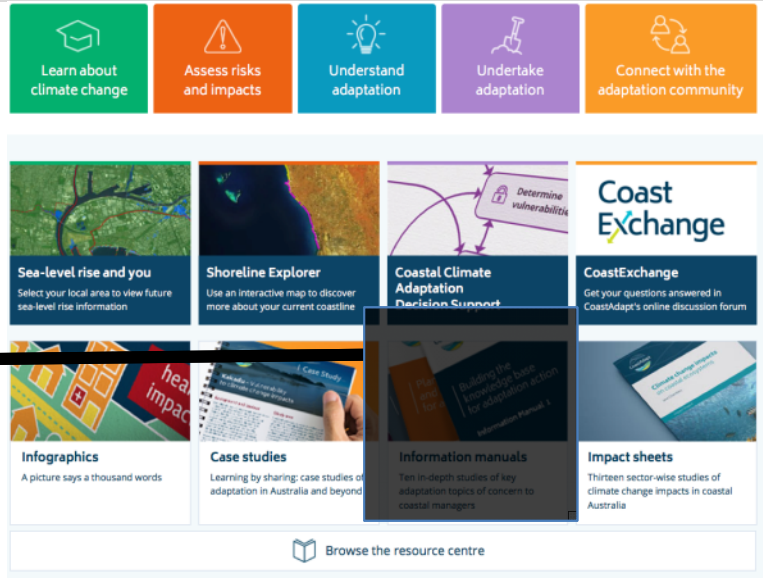
- Does the plan articulate a clear vision?
- Are there goals and unambiguous, measureable objectives?
- Are there indicators for each action that can be measured to assess performance/delivery of each action? Can changes to the indicator be attributed to the action?
- Is there evidence that the plan was developed with sufficient internal or external engagement?
- Does the plan identify an internal or/and external champion(s) who will help to drive the implementation of the plan?
- Are there individuals/groups identified to be responsible for the delivery or next steps associated with each action?
- Is the plan suitably iterative and flexible to ensure it can be altered if outcomes are not achieved or as new information and technologies become available.
- Is the plan equitable, with no particular groups being particularly disadvantaged?
- Is the plan fit for the purpose of your organisation?
- Does the plan contain a diverse range of options (no-regrets, short, medium and long term)?

Simple Tools



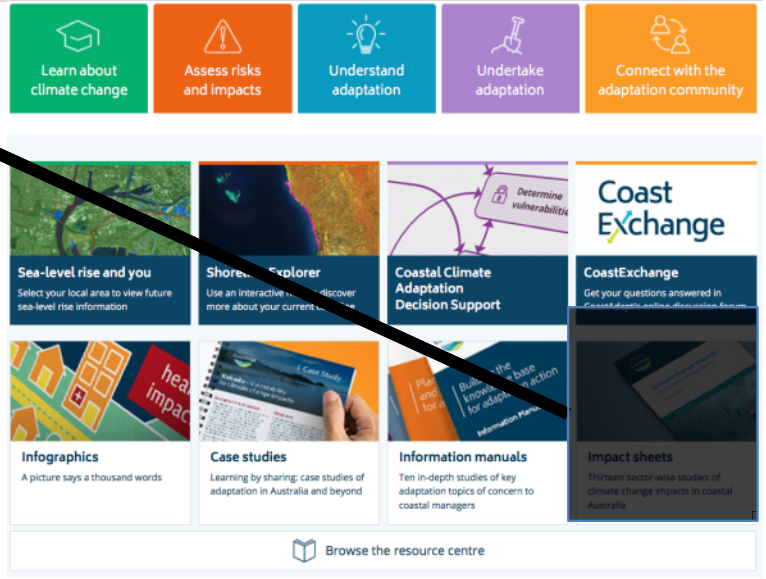
Information Manuals

10 technical “stand alone” manuals



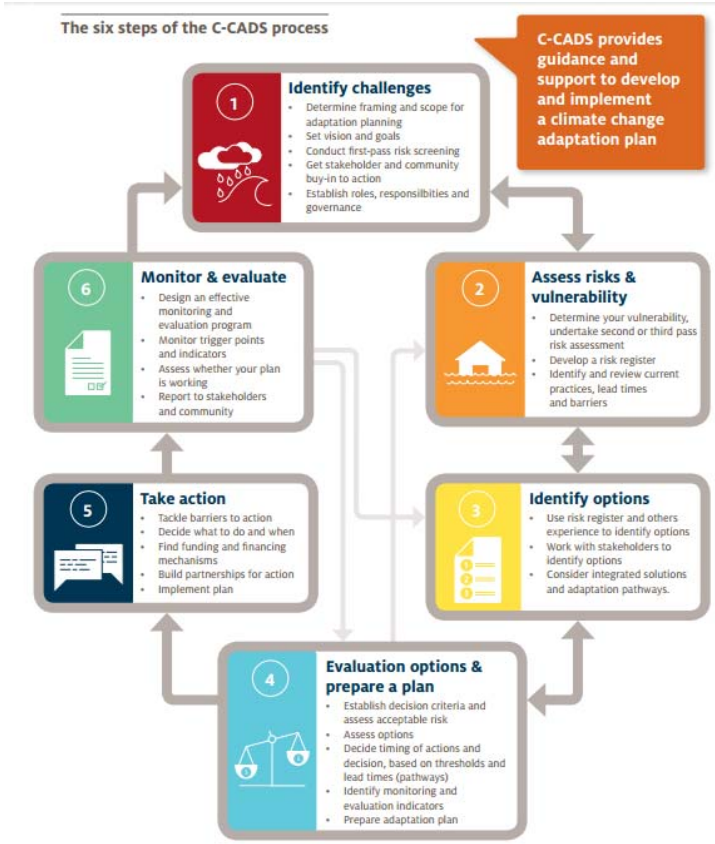
Impact Sheets

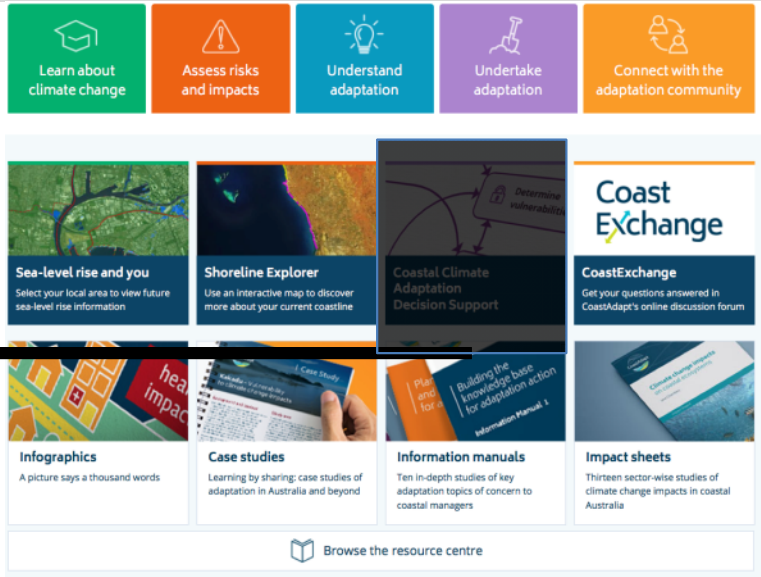
13 sectoral impact sheets



Decision support

C-CADS

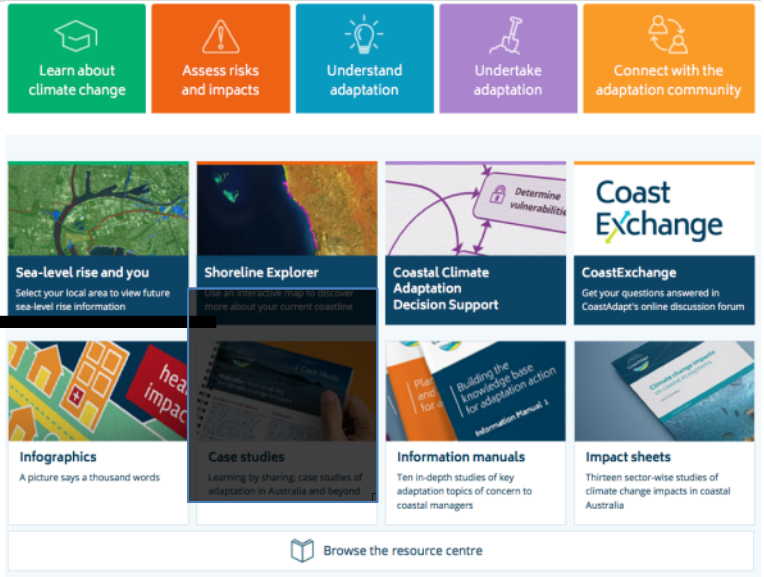


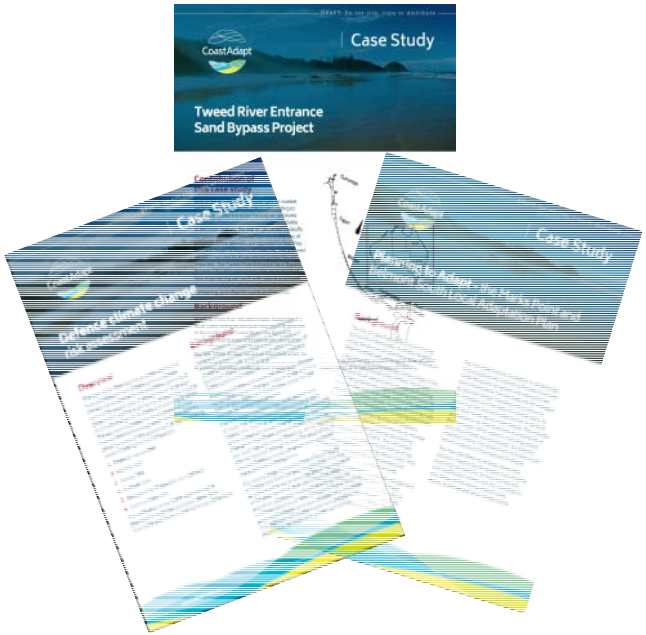


Case Studies and Snapshots

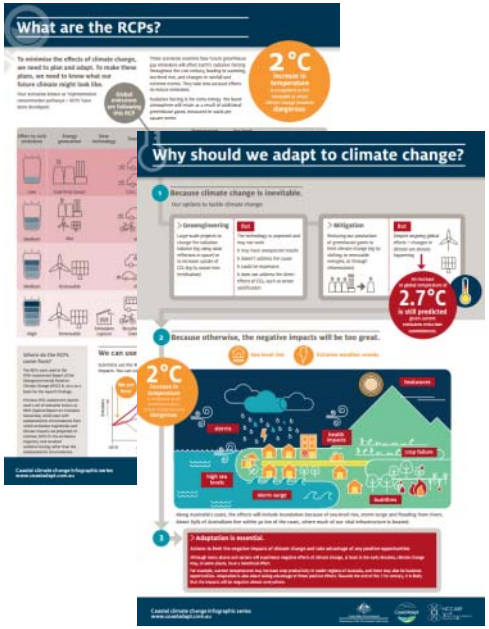
54 case studies

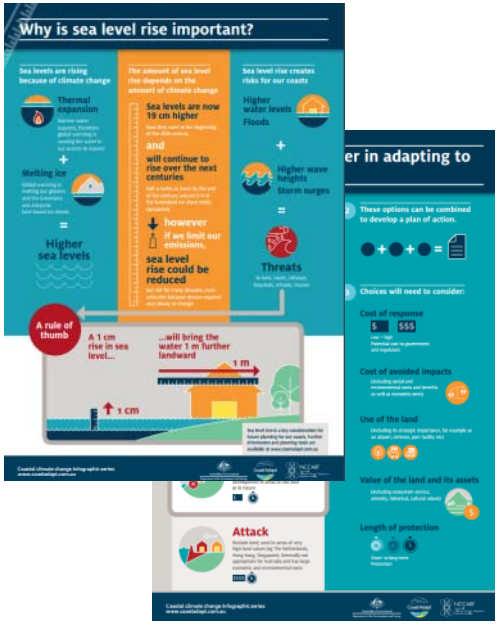
including videos

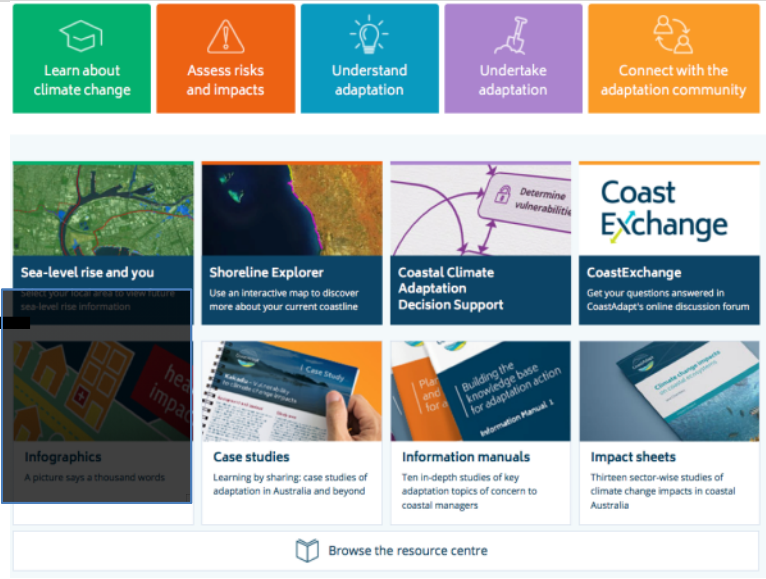


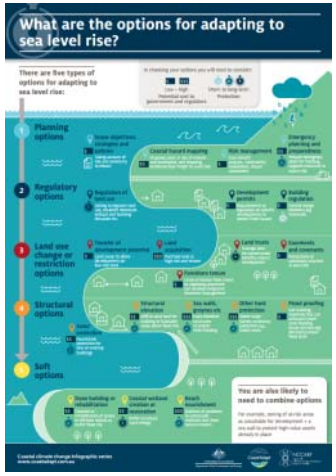


Infographics



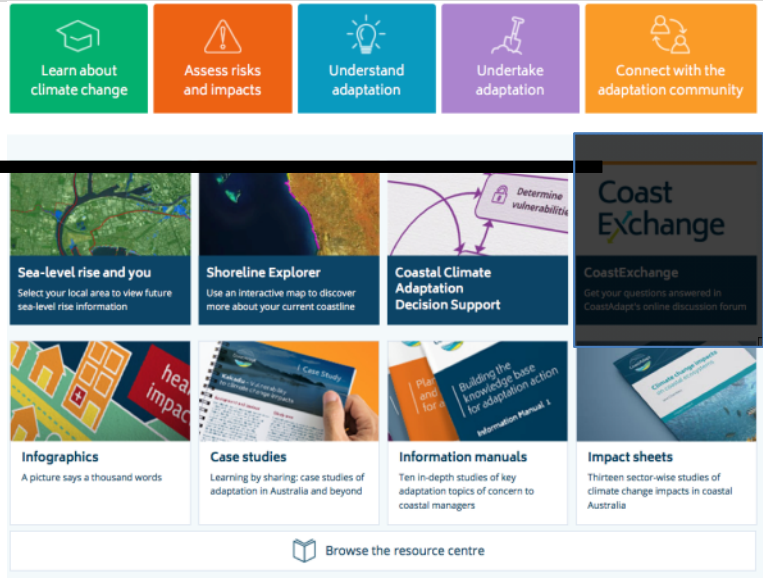






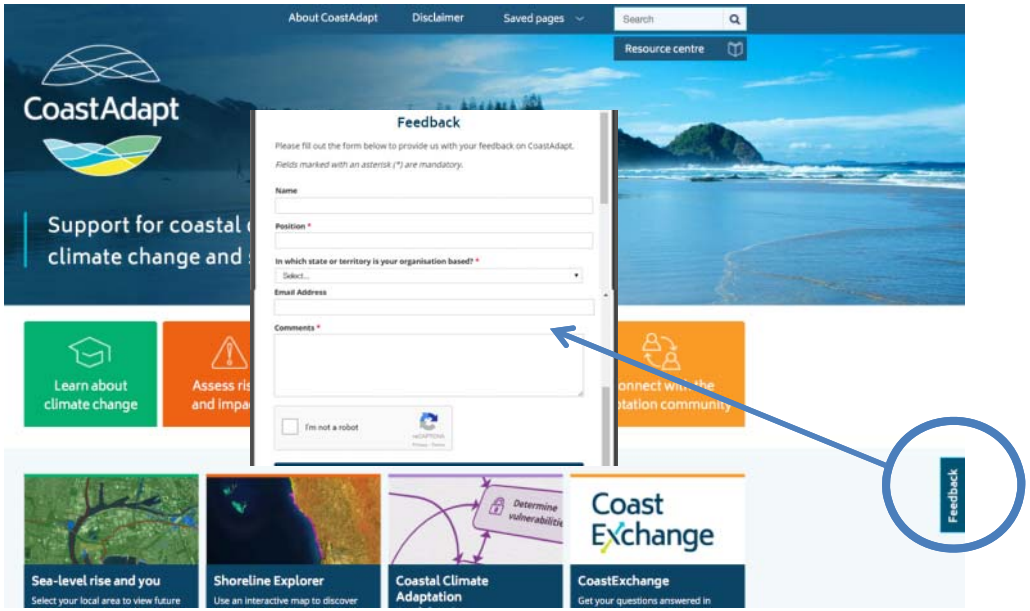
CoastExchange

- Forum for adaptors to connect with their peers, share ideas
- “Ask an expert”



www.connect.coastadapt.com.au/

Providing feedback



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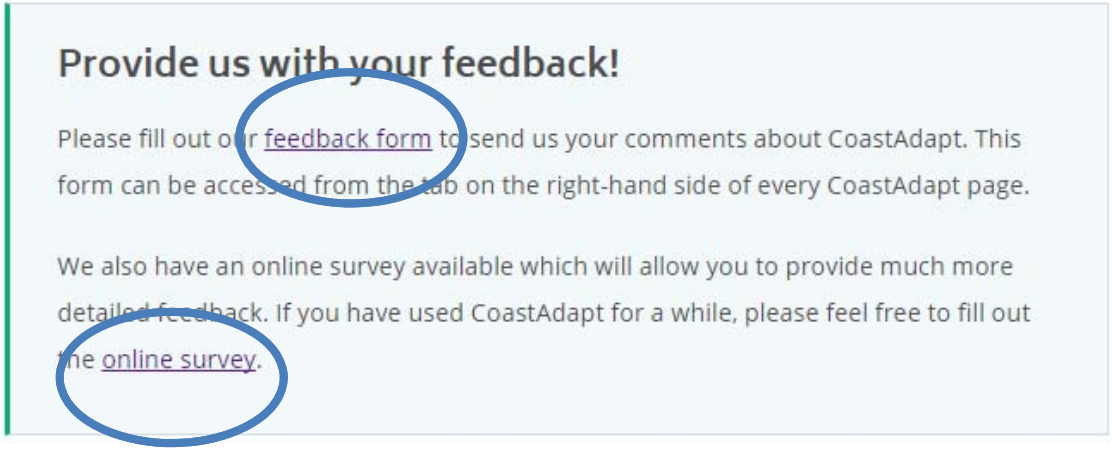

Thankyou

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www.coastadapt.com.au