CoastAdapt: *How to undertake a climate change risk assessment* (<u>http://coastadapt.com.au/how-to-pages/how-to-conduct-a-climate-change-risk-assessment</u>)

Table 1: Recommended context for conducting different types of risk assessments and potential use of their outcomes in adaptation planning.

Types of risk assessment	Appropriate context of use	Outcomes	Use of generated information in the context of adaptation planning
First-pass risk screening	Limited understanding of climate change and how it may affect an organisation.	Using available information (e.g. national and regional scale climate change and sea level rise projections, local studies) and using the first- pass risk screening guidelines and templates (excel spreadsheets), user should be able to shortlist a. potential future climate exposures that are relevant to their region and business and b. decision areas or systems that can be at risk.	 Outcomes should help you to a. prioritise decision areas or systems that need further assessment of risk (a second-pass assessment) b. communicate identified risks to relevant stakeholders c. identify which stakeholders to engage if a second-pass assessment is necessary d. scan through the entire adaptation planning cycle (C-CADS) and develop a broad understanding of possible adaptation options and process for implementation (e.g. when to revisit risks in future etc.).
Second-pass risk assessment	Following first-pass risk screening and a scan over the C-CADS process, you have a broad understanding of your risks and possible adaptation options. Now your organisation wants to explore potential risks of prioritised decision areas, sectors, systems etc. into further detail to understand organisation wide impact of identified risks.	 A second-pass risk assessment will help you to a. identify climate change risks across relevant sectors of your organisation b. identify any cross linkages of impacts identify your organisational capacity to adapt c. generate a list of risks that should be prioritised 	 a. Identification of organisation-wide risks should now be used to develop a detailed adaptation plan following different steps of C-CADS. b. This should also help you to start working towards your <i>Pathways approach</i> and identify when to act.
Third-pass (detailed) risk assessment	 a. You have a clear idea about your organisation's risks and an adaptation plan. Your organisation is considering implementation of a project to protect a system which is at high risk but critical for your organisation's business operation (identified through a second-pass risk assessment). b. As a part of that you want to know more detail about the relevant risk (extent and rate of change) so that sound decisions can be made. 	A third-pass risk assessment should lead to a. detail estimation of rate of change (when the risk will cross the tolerable limit and need action) and b. extent of impact (how badly it will affect the systems).	 a. Outputs of a third-pass assessment should help you to identify the point in time in future when the risk will pass the tolerable limit and an implementation of your planned action will be necessary (see <i>Pathways approach</i> for more detail). b. By knowing further detail of the extent and timing of the risk you may be able to set up a monitoring program to track those changes. c. Detailed data generated through this process can also be useful for making engineering design-related decisions