



TOONDAH HARBOUR

CHAPTER 28 ENVIRONMENTAL MANAGEMENT FRAMEWORK



28. Environmental Management Framework

28.1. Introduction

28.1.1 Purpose of the Environmental Management Framework

The purpose of this chapter is to outline the overarching Environmental Management (EM) Framework for the construction and operation of the Toondah Harbour Project, that will minimise the risk of environmental harm as far as practicable during normal and abnormal operations and, importantly, ensure any impacts to MNES are minimised through an appropriate management and monitoring program.

The EM Framework provides an outline of processes, procedures and actions to be utilised through all stages and areas of the Project, identifies MNES and activity-specific management plans (MPs) that sit within the Framework and provides consistent protocols for environmental management, mitigation and monitoring of relevant impacts of the Project, including any provisions for independent environmental auditing.

The EM Framework should be read in conjunction with other chapters of the draft EIS, as it cross references relevant sections and highlights where further assessment will be undertaken prior to or during Project construction and operational activities.

10.1.1 Objectives

The overarching objectives of this EM Framework and any subordinate management plans are to:

- Achieve and demonstrate compliance with the EPBC Act and any other relevant environmental legislation.
- Provide a framework to ensure the potential environmental risks to MNES associated with the Project are appropriately planned for, and subsequently managed during design, construction and operation of the Project.
- Ensure that all personnel responsible for the construction and operation phases have appropriate access to training and are aware of their environmental responsibilities.
- Establish a framework from which to develop MPs for all relevant MNES, including identification of risk/harm, control strategies, objectives and targets, responsibilities, monitoring, corrective actions and reporting.
- Provide a framework which facilitates documentation, communication, and implementation of contingency plans.
- Ensure that environmental management detail is captured, documented, communicated, and implemented throughout all stages of the Project.
- Ensure communication with the DCCEE and any other relevant authorities as required by legislation.
- Ensure compatibility with other construction and operational MPs that will form part of the EM Framework, for example the Dredge MP.
- Ensure the implementation of the conditions of approval for the Project, if and when they are granted.

10.1.2 Application

This EM Framework is applicable to all activities during construction and operation of the Project and applies to all Project personnel (staff and contractors). Legislatively, the Proponent is responsible for the application of the EM Framework and has the primary responsibility for environmental performance and compliance.

As part of the planning and design phase the EM Framework and subordinate MPs will be updated to incorporate approval conditions required by regulatory authorities.

10.1.3 Relevance to the EPBC Act

The Project's EPBC Act EIS guidelines include requirements relating to the development of environmental management plans (EMPs), with Items 6, 7, and 11 of the guidelines directly relevant to this EM Framework. As construction of the Toondah Harbour Project will be staged over a 15-to-20-year period, detailed management and monitoring measures and compliance criteria cannot be provided prior to receiving approval. The environmental management of the site will adapt over time to encompass improvements in engineering and environmental monitoring methods as well as site-specific knowledge gained during early stages of construction. As a result, this framework sets out how environmental management programs will be formulated and implemented to meet the requirements of the EPBC Act and includes key management measures identified by EIS technical studies to mitigate impacts on MNES and other environmental values.

Item 6: Environmental Management Plans

The EIS must include a detailed outline of any Environmental Management Plans (EMPs) that sets out the framework for management, mitigation and monitoring of relevant impacts of the action, including any provisions for independent environmental auditing.

The EMPs need to address the project phases (construction, operation and handover) separately and any staging of each phase. Each EMP must state the environmental objectives, performance criteria, monitoring, reporting, corrective action, responsibility and timing for each environmental issue.

The EMPs must also describe contingencies for events such as failure of sewerage systems, heavy or prolonged rainfall, storms, or saltwater intrusion into ground water.

The name of the agency responsible for endorsing or approving each mitigation measure or monitoring program must be provided.

All EMPs must be in accordance with the Department's Environmental Management Plan Guidelines and take account of the Australian Ramsar Management Principles (EPBC Regulations):

- (a) clear, measurable, time specific environmental outcomes to be achieved by implementing the plan. The plan defines environmental outcomes as measurable extent and condition targets, or circumstances of, the protected matter (e.g. water quality environmental values, ecological attributes/function).*
- (b) clear, measurable, time specific performance and completion criteria:*
 - performance criteria are time-bound short and medium term targets, for management interventions and environmental condition, that are used to monitor, evaluate, review and improve the effectiveness of the plan; and*
 - completion criteria are time-bound longer term values, specified for measurable parameters, that if attained and maintained ensure the plan's environmental outcome/s have been achieved.*
- (c) clear, measurable, time specific management measures that will be implemented to avoid and/or mitigate environmental impacts. Each management measure and corrective measure:*
 - has timeframes for implementation;*
 - is described in sufficient to avoid ambiguity and to inform plan implementation;*
 - is related to quantitative and auditable performance and completion criteria; and*
 - is derived from recognised principles, practice, or guidelines, and is justified - technically, scientifically and/or legally – as an effective and appropriate measure to achieve the plan's objective/s.*

- (d) *a clear, measurable, time specific schedule and triggers for auditing the implementation and effectiveness of the plan and outlines auditable systems for recording plan implementation and the environmental outcomes achieved.*

Item 7: Adaptive Management: Addressing Uncertainty and Managing Risk

The EIS must identify key adaptive management measures addressing uncertainties and inherent risks. Uncertainties could, for example, include knowledge gaps in scientific understanding and the timing, effectiveness, or capacity to implement, maintain, operate and enforce management measures.

The EIS must describe how the adaptive management strategies will be implemented to ensure MNES are effectively protected over the life of the project. This includes how:

- (a) *monitoring of MNES will occur, including monitoring of progress in achieving the desired conservation outcomes identified in the EIS, how the monitoring will be analysed throughout the life of the project and how the results of the monitoring will influence the project; and*
- (b) *new information relating to MNES or the EIS is to be assessed and accounted for in management of the area affected by the project.*

Item 11: Auditing and Reporting

The EIS must set out:

- (a) *a program of baseline reporting on the current status/condition of the site and surrounding region;*
- (b) *a program of monitoring, public reporting and independent or third party auditing to be undertaken;*
- (c) *a process that will incorporate these findings into ongoing management;*
- (d) *who is responsible for overseeing and taking these actions; and*
- (e) *record keeping and review processes under the approval.*

28.1.2 Other Relevant Legislation

Further detail on relevant legislation, policies and guidelines can be found in Chapter 5 and within the introductory section of each technical chapter (Chapters 7-22). However, a brief summary of key relevant legislation is provided below.

28.1.2.1 Environment Protection Biodiversity Conservation Act 1999 (EPBC Act)

The Australian Government's key piece of environmental legislation is the EPBC Act. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places — defined in the EPBC Act as matters of national environmental significance (MNES).

National Assessment Guidelines for Dredging 2009 (NAGD)

These guidelines provide an approach for assessing the quality of sediments and their suitability for ocean placement. They do this through a regulatory framework, which is applied to ensure the impacts of dredged material loading and disposal are adequately assessed and, when ocean placement is permitted, that impacts are managed responsibly and effectively.

Environmental Management Plan Guidelines, Commonwealth of Australia 2014

These guidelines provide general guidance to stakeholders preparing EMPs for environmental impact assessments and approvals under the EPBC Act. EMPs can be submitted during the environmental impact assessment process and may be part of the documentation considered when deciding whether to approve a proposed action. If the proposed action is approved, EMPs are often referenced in the conditions of approval. In addition, approval conditions sometimes require revised or additional EMPs to be approved before the approved action can begin. These guidelines assist with the preparation of EMPs in all of these circumstances.

28.1.2.2 *Environmental Protection Act 1994 (EP Act)*

The EP Act is the primary environmental regulation in Queensland. It lists obligations and duties to prevent environmental nuisance and harm. The EP Act sets out enforcement tools that can be used when offences or acts of non-compliance are identified. Under the EP Act, there is a general environmental duty which applies to everyone.

28.1.2.3 *Environmental Protection (Water) Policy 2009 (EPP Water)*

The purpose of this policy is to achieve the objective of the EP Act in relation to waters and wetlands, through:

- Identifying environmental values for waters and wetlands;
- Identifying management goals for waters;
- Stating water quality guidelines and WQOs to enhance or protect the environmental values (EVs);
- Providing a framework for making consistent, equitable and informed decisions about waters; and
- Monitoring and reporting on the condition of waters.

28.1.2.4 *Environmental Protection (Air) Policy 2019 (EPP Air)*

The Air EPP identifies values to be enhanced or protected, sets objectives (limits) for impact, and provides a framework for informed decisions concerning air quality. The limits (criteria) within the Air EPP are used within modelling assessments to determine the relative risk of a project.

28.1.2.5 *Environmental Protection (Noise) Policy 2019 (EPP Noise)*

The noise level goals for operations may be determined from the EPP (Noise). The purpose of the EPP (Noise) is to achieve the objects of the EP Act by:

- Identifying and declaring the EVs of the acoustic environment; and
- Stating acoustic quality objectives that are directed at enhancing or protecting the EVs; and
- Providing a framework for making consistent, equitable and informed decisions that relate to the acoustic environment.

28.1.2.6 *Aboriginal Cultural Heritage Act 2003 (ACH Act)*

The ACH Act recognises and protects significant Indigenous cultural heritage in Queensland. The Project must comply with the Cultural Heritage Duty of Care provisions of the ACH Act. Irrespective of any recorded places on the Queensland Cultural Heritage Register, all reasonable and practicable measures to ensure any activity does not harm Aboriginal or Torres Strait Islander cultural heritage must be undertaken. Under the Act, the Project will require a cultural heritage management plan (CHMP) to be developed and agreed between the Proponent and QYAC as the registered cultural heritage body for land within the Project footprint.

28.1.2.7 *Nature Conservation Act 1992 (NC Act)*

The principal legislation for the conservation and management of Queensland's native flora and fauna species is administered by the Queensland Department of Environment and Science (DES). The key goal of the NC Act is the protection of endangered, vulnerable and near-threatened (EVNT) species of flora and fauna.

28.1.2.8 *Economic Development Act 2012 (ED Act)*

The proposed development is in a declared PDA, and consequently will be assessed under this Act. The Project will require assessment against the Toondah Harbour PDA Development Scheme in accordance with the development assessment process under the ED Act. State interests, as set out in the State Planning Policy (2017), are frontloaded into PDA development schemes.

28.1.3 Proponent's Environmental Record

Walker Group Holdings Pty Ltd is the party taking the action and has a satisfactory record of responsible environmental management. Lang Walker AO is the majority shareholder of both Walker Group Holdings and Walker Corporation Pty Ltd, which was established in the 1960s and is one of Australia's largest private, diversified development companies.

Walker entities have developed more than 1,000 projects in all states and territories and in all property sectors over a period spanning 50 years.

Walker Group Holdings Pty Ltd is not a publicly listed company and therefore there are no statutory requirements for it to have a formal environmental policy. However, in recognising the value of the surrounding natural environment, Walker is committed to ensuring the Project is sustainable. All works will be controlled by conditions of consent associated with approvals issued under Federal and State environmental law.

28.2. Draft EM Framework Structure

To ensure the planning and delivery of the Project are responsibly and effectively managed, several management plans will be prepared that sit within the EM Framework. The EM Framework will operate across three categories to ensure site management protects the EVs of Toondah Harbour, the MBRS and MNES. Specifically:

- A set of Project-wide procedures will apply across all of the MPs that are part of the EM Framework;
- MNES-specific MPs focusing on avoiding and minimising impacts on any EPBC matters that may potentially be impacted by the Project; and
- Activity-specific EMPs (Activity MPs) which will be used on the ground by the site managers and all staff and contractors. Any management measures identified by the MNES MPs must be reflected in the relevant Activity MP.

The EM Framework also provides a procedure for post-construction handover of EMPs for certain infrastructure (e.g. marina, boat ramp, ferry terminal) to their ultimate managers/operators to ensure all environmental obligations continue to be met during operational phases.

A Technical Advisory Panel (TAP) will be commissioned from experts in relevant fields to carry out the EM framework review process. This will ensure proper oversight of environmental management associated with the Project and that the most up-to-date scientific information and methods are being used to manage impacts throughout the Project's construction lifecycle of 15 – 20 years.

A conceptual diagram showing how the EM Framework will be implemented is provided in Figure 28-1 and a brief description of how each management category will be applied is outlined below.

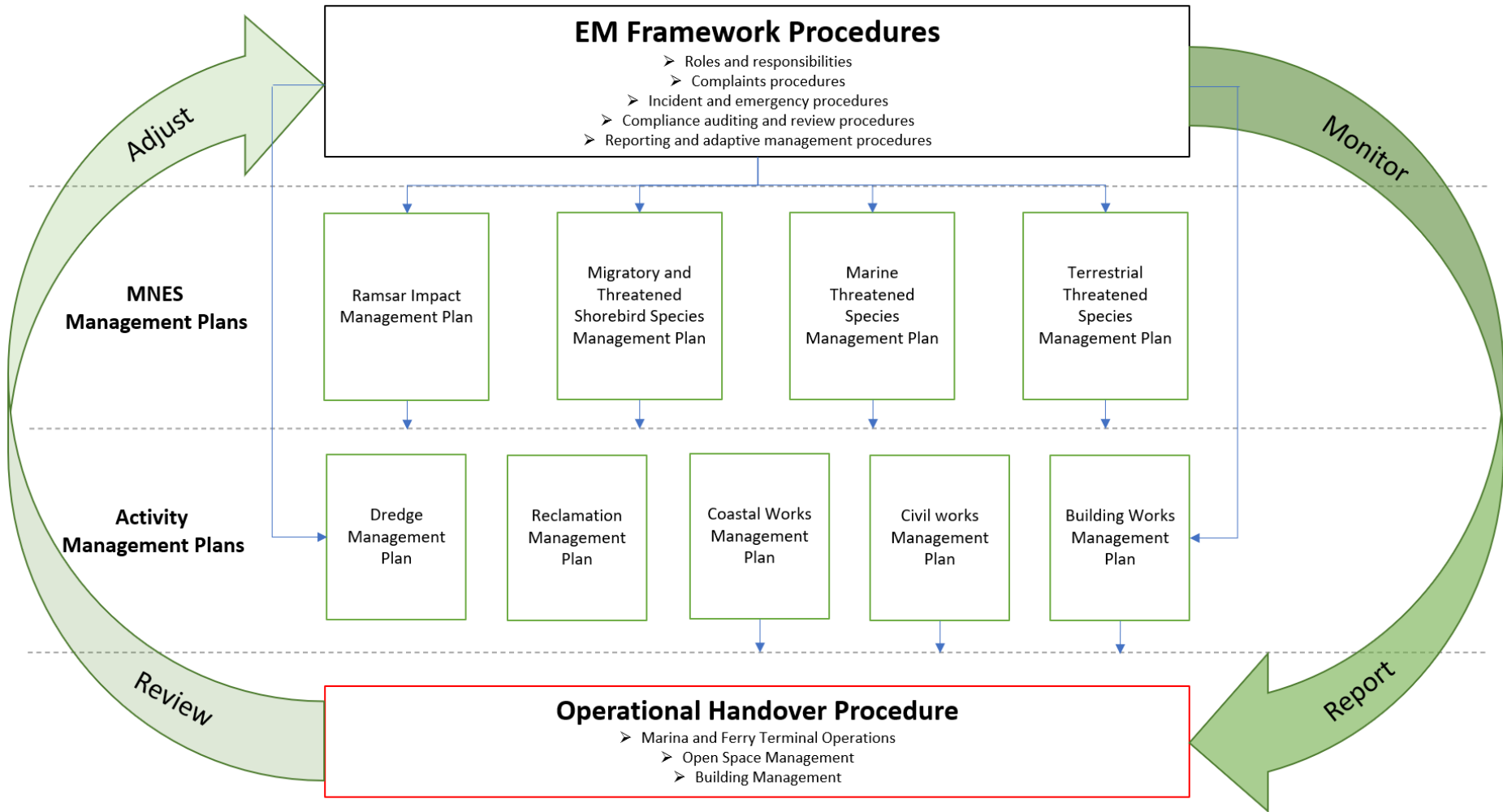


Figure 28-1: Draft Environmental Framework Conceptual Diagram.

28.2.1 Draft EM Framework Procedures

The EM Framework includes overarching procedures that must be utilised for all of the MPs developed for the Project. These procedures will provide a consistent structure for site management and reporting no matter where and when works are being undertaken. The procedures incorporate implementation of the adaptive management process, so that any changes to project management are applied across all stages of works. The overarching procedures address:

- Working hours;
- Roles and responsibilities;
- Complaint handling;
- Incident and emergency response;
- Compliance auditing and reviews; and
- Reporting and adaptive management.

The use and implementation of these procedures is described in Section 28.3.

28.2.2 MNES Management Plans

MPs will be developed for all MNES that have the potential to be impacted by the Project. MPs have been divided up based on the MNES and type of threatened or migratory species, given that potential impacts and management measures will be similar for these groups of species. The MNES MPs to be developed as part of the EM Framework are:

- Moreton Bay Ramsar Site Impact MP;
- Migratory and Threatened Shorebird Species MP;
- Migratory and Threatened Marine Species MP; and
- Migratory and Threatened Terrestrial Species MP.

MNES MPs will include specific management and monitoring measures identified through the draft EIS under the following sub-plans:

- Soils, Sediments and Contaminated Land;
- Coastal Processes;
- Water Quality;
- Groundwater;
- Air Quality;
- Terrestrial and Underwater Noise and Vibration;
- Lighting; and
- Waste Management.

In addition, each MP will include a sub-plan detailing management and monitoring measures specific to the MNES being addressed. For example, the Migratory and Threatened Shorebird Species MP will include measures specific to that MNES such as noise buffers and lighting requirements to minimise potential disturbance at roosting sites.

For each sub-plan the overall environmental outcomes and performance and completion criteria will be identified including details such as timeframes and monitoring, corrective actions, and auditing requirements where appropriate.

Draft MNES MP sub-plans are included as Appendix 3-C. It is anticipated that the MNES MPs will be finalised in consultation with DCCEW as a requirement of the conditions of EPBC Act approval with final sign off required by the Minister or their delegate.

28.2.3 Activity Management Plans

Activity MPs will be specific to the different types of construction activities carried out on site. Activity MPs will incorporate all management and monitoring measures outlined in the MNES MPs as well as any other management and monitoring measures required to minimise and avoid impacts on environmental values and address other legislative requirements. It is not anticipated that these plans will be required as part of the EPBC Act approval, however they will be used across the various construction activities to ensure MNES environmental outcomes and criteria are achieved. While they will not require specific approval under the EPBC Act, Activity MPs will require endorsement from a number of Queensland Government agencies, including the DES, EDQ and MSQ.

Activity MPs to be developed for the Project, and their likely relevant endorsement agencies, are shown in Table 28-1. While there is no legislative requirement for EDQ to refer these MPs to other agencies, it is likely they will be referred to a range of other Queensland Government agencies for their review and feedback. These agencies are also listed.

Table 28-1: Activity MPs and Endorsement Agencies.

Activity MP	Endorsement Agency	Likely review agencies
Dredge MP	DES	EDQ, MSQ
Reclamation MP	EDQ	DES
Coastal Works MP	EDQ	MSQ, DES
Civil Works MP	EDQ	RCC
Building Works MP	EDQ	RCC

Given the 15-to-20-year construction timeframe for the Project, not all Activity MPs will need to be actively implemented over the entire construction period. Construction activities over time and the relevant MP are outlined in Table 28-2. Construction sequencing has been shown visually in Chapter 2 of the Draft EIS as Figures 2-20 and 2-21.

Table 28-2: Activity Management Plan Implementation During Construction Periods.

Period from Commencement	Construction Activities	Relevant Activity MP
Year 1	<ol style="list-style-type: none"> 1. Establish construction site, including access 2. Enclose northern reclamation area with sheet piles and rock bunding 3. Commence stabilisation and dewatering of in situ material 	<ul style="list-style-type: none"> ■ Reclamation MP ■ Civil Works MP
Year 2 - 4	<ol style="list-style-type: none"> 4. Complete Stage 1 dredging (inner Fison Channel and turning basin) and place in northern landform 5. Complete northern reclamation landform 6. Commence and complete marine infrastructure and ferry car parking upgrade. Existing ferry access and no net loss of ferry car parking maintained at all times during construction 7. Commence and complete Middle Street and Shore Street East road upgrades. Vehicle access maintained at all times 	<ul style="list-style-type: none"> ■ Reclamation MP ■ Civil Works MP ■ Dredge MP ■ Coastal Works MP ■ Building Works MP

Period from Commencement	Construction Activities	Relevant Activity MP
	8. Commence staged civil and building works in northern residential area 9. Commence staged civil and building works in mixed use node and ferry precinct	
Year 5 - 7	10. Complete staged civil and building works in the northern residential area and mixed-use node 11. Complete staged civil and building works in the ferry precinct 12. Enclose southern reclamation area with sheet piles and rock bunding 13. Commence stabilisation and dewatering of in situ material in southern reclamation area 14. Complete Stage 2 dredging (outer Fison Channel) and place material in southern reclamation area	<ul style="list-style-type: none"> Reclamation MP Civil Works MP Dredge MP Building Works MP
Year 8 - 10	15. Complete southern reclamation landform 16. Commence and complete 'in the dry' marine infrastructure works for marina and internal waterways 17. Connect internal waterways to Moreton Bay 18. Commence staged civil and building works in southern residential area	<ul style="list-style-type: none"> Reclamation MP Civil Works MP Coastal Works MP Building Works MP
Years 10 - 20	19. Staged civil and building works in southern residential area to completion 20. Complete marine infrastructure works for remaining marina wet berths	<ul style="list-style-type: none"> Civil Works MP Coastal Works MP Building Works MP

Additional Activity MPs may be developed where the need is identified. Any new plans are required to incorporate measures identified in the MNES MPs and EM Framework procedures.

28.2.4 Operational Handover Procedure

Upon completion, a number of infrastructure-related Project components will be handed over to other entities to manage on an ongoing basis (refer to Section 2.3.8 and Figure 2-19 of the Draft EIS). The handover will occur once construction has been completed and prior to operations commencing. Public areas such as the ferry terminal and associated facilities, ferry car parking and public open space will be handed over to RCC or an associated entity to manage, while the marina and buildings will be handed over to specific operators and body corporates to manage.

Ongoing management requirements to avoid and minimise impacts to MNES will form part of contractual documentation provided in the handover and will require acceptance by the relevant parties before handover is completed. It is noted RCC has its own procedures for handover that the Proponent will be required to meet, including establishment of vegetation and amenities in open space areas.

Specific management actions to be included in handover documentation will be addressed in the MNES MPs.

28.2.5 Review and Technical Advisory Panel

The EM Framework and subordinate MPs will be routinely reviewed by the TAP, which will include experts from a range of relevant industries. Expertise reflected on the panel will include, but not be limited to:

- Marine ecology;
- Water quality;
- Maritime engineering and dredging;
- Terrestrial and marine contamination; and
- Koala ecology.

Representatives from RCC and relevant government agencies such as DCCEEW and DES will also be invited to join the TAP.

The TAP will be commissioned prior to the commencement of on-site works to review the draft EM Framework. The TAP will then be involved in annual reviews of the framework and advice will be obtained as required from other subject matter experts as required, e.g. in the event of monitoring criteria exceedances or any other incidents or management issues that may occur in their subject area.

On completion of the review process, the TAP will issue a recommendations report that will be used to guide updates to the EM Framework. This report will be provided to relevant government agencies as part of the annual compliance review.

28.3. Outline of Draft EM Framework Procedures

28.3.1 Working Hours

During the construction phases of the Project the standard hours of operation during construction will be:

- Monday to Friday: 7:00 am to 6:00 pm;
- Saturday: 8:00 am to 1:00 pm; and
- Sundays and public holidays: No works.

Some works will be permitted outside these standard hours (as deemed appropriate), including:

- Works which do not cause noise emissions to be more than 5 dBA higher than background noise levels at any nearby residential property or other noise sensitive receptors;
- Delivery of plant, equipment, and materials if required outside these hours by authorities for safety reasons. In such cases, suitable notification will be given to the community; and
- Any emergency work to avoid the loss of lives, property or to prevent environmental harm.

The exception to the above is capital dredging works, which will be carried out up to 24 hours a day for six days a week, with no dredging to be carried out on Sundays. As there can be no disruption to the existing vehicle and passenger ferry operations at any point in time during the dredging campaigns, extended working hours are required to enable the dredging works to be undertaken within the Fison Channel and turning basin at times when they are not being used by ferries. The first ferry service departs from Toondah Harbour at 4.55 am on weekdays and 5.55 am on weekends and public holidays. The last ferry service arrives in Toondah Harbour at 7.20 pm daily.

During normal operations at the ferry terminal and marina, with the exception of maintenance dredging, work involving the use of machinery will only be carried out from 7:00 am to 6:00 pm on Monday to Friday, or on Saturdays from 8:00 am to 1:00 pm. No work is to be carried out on Sundays or public holidays.

28.3.2 Roles and Responsibilities

28.3.2.1 Site Management

Walker Group Holdings Pty Ltd is the party taking the action, and therefore will be the approval holder. However, the Proponent is not a construction company and where relevant, responsibility for construction phase environmental management activities and compliance will be assigned to its construction contractor/s, through contract documentation and specifications.

Responsibility for the operational phase for some components of the Project will be transferred to other providers (e.g. marina operator) and RCC. Accordingly, these providers will take on all environmental responsibility once handover procedures have been completed.

Procedures for monitoring, reporting, incident management and corrective action requirements are outlined in this EM Framework. To ensure ongoing environmental performance and compliance with this framework, annual external environmental audits of the framework and subordinate MPs will be conducted during construction and operations.

The Site Manager is responsible for implementation of the EM Framework. A single Site Manager will be responsible for all works at the site and must ensure that all personnel employed or sub-contracted to construct the Project are trained in environmental responsibilities (as identified in this EM Framework and as legislated by law), refer to Figure 28-2.

The Site Manager will be responsible for:

- Overall site management;
- Monitoring implementation of the EM Framework and all subordinate MPs;
- Daily management and compliance with the EM Framework and all subordinate MPs; and
- Appointment and oversight of a Health, Safety and Environment (HSE) Manager and Work Area Managers (WAMs).

WAMs may also be required where there are multiple work faces occurring on site. For example, separate managers may be used to oversee reclamation and dredging works and civil works. The WAMs will be responsible for:

- Management of activity or location specific works;
- Monitoring implementation of the relevant Activity MPs and
- Reporting any on site issues or non-compliances to the Site Manager.

The HSE Manager will be responsible for:

- Supervising the environmental management of day-to-day work;
- Advising the Site Supervisor and Proponent (approval holder) of compliance and effectiveness of the EM Framework; and
- Reporting on MP implementation and performance.

In addition to any specific roles, all personnel associated with the Project have the following environmental responsibilities:

- A general environmental duty – that is, any person performing a role or duties for the Project shall do so in such a manner which will not cause (or be likely to cause) environmental harm, unless the person has taken all reasonable and practicable measures to prevent or minimise the harm; and
- Duty to notify environmental harm – that is, if a person in the performance of their role or duties becomes aware that serious or material environmental harm is caused or threatened, then that person must immediately contact the Site Manager. The Site Manager must then immediately follow relevant protocol and notification procedures.

Further details on the roles and responsibilities as they pertain to environmental management on-site will be developed and provided at all training and inductions to site. These will also be clearly displayed in the site office, and at all entry points to site.

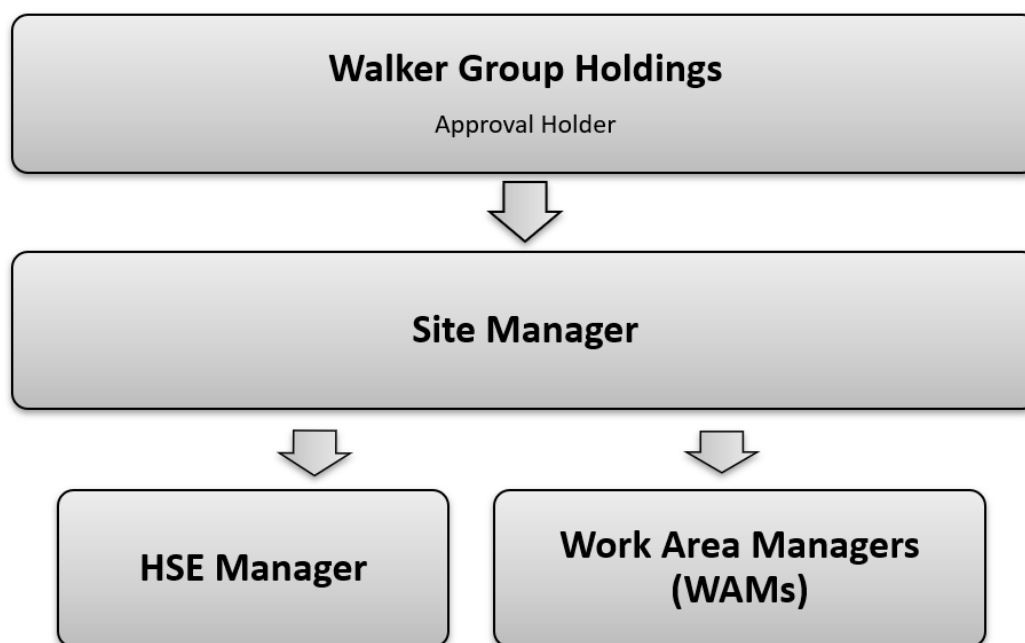


Figure 28-2: Construction Roles and Responsibilities.

28.3.2.2 Site Contacts

At this stage, all roles are yet to be appointed. Once appointed, they will be clearly identified on all management plans for the Project, and easily accessed and clearly displayed on-site.

28.3.2.3 Management of Records

A copy of all MNES MPs and Activity MPs will always be kept in the site office.

Any record, report, or document required by this EM Framework, or requested by a regulatory authority, must be kept at the Project site office for five years and be available upon request by an authorised person.

Records must be kept of:

- The key environmental performance indicators;
- Monitoring results;
- Corrective actions;

- Any environmental incidents and complaints;
- Reports to management; and
- Any records required by law (e.g. regulated waste tracking).

28.3.2.4 Training Requirements

It will be the responsibility of the HSE Manager to ensure all employees and sub-contractors are inducted into the EM Framework, and appropriate training records must be kept. Site inductions must be conducted prior to any personnel performing construction or operational duties on site (as relevant). In addition to site inductions, daily toolbox meetings will be run during construction.

Site inductions will include, but not be limited to:

- The requirements of the EM Framework;
- Spill kit use and response'
- Relevant equipment and associated maintenance;
- Location and general information on relevant areas of environmental concern, such as koala habitat trees, high tide roosting sites, etc.;
- Complaints procedures;
- Incident and emergency procedures;
- The general duty of environmental care that all personnel are responsible for; and
- Duty to notify environmental harm that all personnel are responsible for.

28.3.3 Complaints Procedure

A complaints register will be established and maintained by the Site Manager. For any complaint, the following details will be recorded:

- Time, date, name, and contact details of the person making the complaint
- Reason/s for complaint
- Any investigations undertaken;
- Conclusions or outcomes of the investigation/s; and
- Any actions taken.

The complaints register will be kept up to date and accessible. It must be provided in the instance an administering authority requests it. Figure 28-3 outlines the general procedure to be followed when a complaint is received.

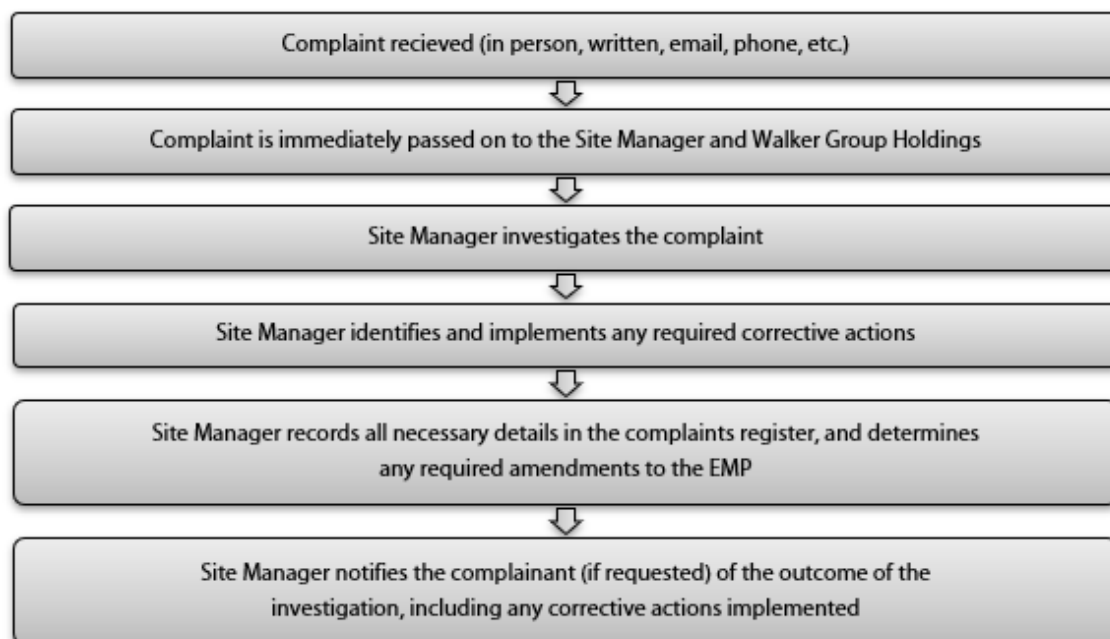


Figure 28-3: Complaints Procedure.

28.3.4 Incident and Emergency Procedures

An incident is considered to be any event that results in non-compliance with the EM Framework or any of the subordinate MPs, such as:

- A complaint about the Project or Project-related activities;
- A fuel or hazardous substance spill, into the terrestrial or marine environment;
- Persistent exceedance of monitoring or performance criteria;
- Dust, noise, or odour emissions;
- Injury to wildlife or persons;
- Damage to property;
- Waste disposal which is not in accordance with manufacturer's specifications or regulations; and
- Failure of sewerage system (or similar) beyond that which has been allowed for within the design requirements, as per legislation, and described in Section 2.5.2 of the EIS.

28.3.4.1 Incident Investigation

All incidents shall be immediately forwarded to the HSE Manager. Upon notification, the HSE Manager should investigate the incident to determine:

- The nature, type, location, and extent of the incident and the impacted area;
- What the actual and/or potential environmental impacts of the incident are (this may require further monitoring to ascertain);
- Likely cause of the incident;
- Mitigation measures that can be implemented to reduce further environmental harm;
- Corrective actions are required to rectify any environmental harm; and
- Any preventative measures to be implemented to limit likelihood of a recurrence of the same, or similar, incident.

The HSE Manager will engage, as appropriate, a suitably qualified environmental consultant to assist with the environmental assessment. Environmental monitoring of contaminant releases into water, air, or onto land, or further monitoring of noise and light spill may be required. The environmental consultant shall determine what sampling and laboratory tests are appropriate, as well as the relevant legislation and guidelines for assessing compliance.

28.3.4.2 Incident Reporting

All Project personnel (including contractors) are responsible for reporting incidents to the HSE Manager. The HSE Manager is responsible for reporting environmental incidents to the Site Manager, Walker Group Holdings and any relevant authorities.

An incident report form is to be developed, and all incidents are to be recorded on such form. The form will include:

- Name of person reporting the incident;
- Location of the incident;
- Details of the incident;
- Actions that occurred following the incident (including date and personnel);
- Actions that are recommended, including timing for them to occur;
- Signatures of relevant personnel informed;
- Site Manager signature; and
- Name of authority/agency contacted, date contacted, and record of contact.

In the event of an unauthorised contaminant release, the HSE Manager shall telephone the 24/7 Pollution Hotline (1300 130 372) as soon as practical after being notified of the release. Additionally, written notice must be provided to DES within 14 days of the initial notification. If the incident may result in an impact on a MNES, written notice will also be provided to DCCEEW. The written notice must include:

- Name of the operator (including their approval / registration number);
- Name and contact number of a designated contact person;
- Substance and quantity released;
- Vehicle and registration details;
- Names of any person/s involved (driver and any others);
- Location, date, and time of the release;
- Likely cause of the release;
- A description of the effects of the release;
- The results of any sampling performed in relation to the release;
- Details of actions undertaken to mitigate any environmental harm caused by the release; and
- Details of proposed actions to prevent a recurrence of the release.

28.3.5 Spill Response Procedure

If the spill of fuel, chemical, or hazardous substance threatens the immediate safety or health of people, creates a fire hazard, causes serious environmental harm, or has the potential to cause serious environmental harm then it is considered to be an emergency, and the site emergency procedure should be followed.

28.3.5.1 Chemical Spills

If a chemical spill occurs, the material safety data sheet (MSDS) provides the relevant information for the containment and clean up procedure for that chemical. The following steps will also be considered:

1. Identify the source of the spill and stop the source if it is safe to do so:
 - Check for danger;
 - Prevent the spill from getting larger (check valves, block any damaged tanks or pipes, etc.); and
 - Use any suitable material or equipment to confine the spill (e.g. use spill response booms or absorbent equipment, or soil or other suitable material if no spill kit is immediately available).
2. Clean up the spill:

- After containment, recover as much of the spilled substance as possible, and place it in an appropriate container for disposal. Absorb any remaining spill with absorbent material and place in the appropriate waste receptacle; and
- Replace any equipment used from a spill kit.

3. Report the spill:

- Investigate and report all spills in accordance with Section 28.3.7 of this draft EIS.

28.3.5.2 *Spill Kits*

Spill kits and/or spill clean-up equipment will be available throughout the site, including spill kits with containment (floating) booms for any overwater spills. The locations of spill kits will be presented on a map in the site office and discussed at site inductions.

Spill kits will be regularly checked by the HSE Manager to ensure adequate supply of all items. Any equipment used will be replaced immediately after, to the amount outlined in the list on the kit.

28.3.5.3 *Soil Contamination*

In the instance of a hydrocarbon spill creating contaminated soils, the preferred treatment options are:

1. **On-site treatment** of contaminated soil to reduce the hazard to an appropriate/acceptable level;
2. Excavate soil and treat **off-site** to ensure the contaminant is destroyed, or hazard is reduced to an appropriate/acceptable level; or
3. Should implementation of these two options not be possible, an alternative treatment must be undertaken, if such treatment can reduce the concentration of the contaminant to an acceptable level without excavating affected soil and disposing it off-site.

Any contaminated soil (e.g. any hazardous substance, including hydrocarbons) should be treated based on the volume:

- **Volume <1.0 m³**: soil must be disposed of in a regulated waste bin, and a soil disposal permit shall be obtained from DES prior to removal of the soil from site; or
- **Volume >1.0 m³**: a suitably qualified environmental consultant shall be contacted to provide advice on the best treatment method – i.e. whether it should be treated in situ or excavated and disposed of.

If temporary storage of contaminated soil is required, it must only occur in designated locations, and under appropriate containment measures.

28.3.5.4 *Water Contamination*

If a spill has occurred and water may be contaminated, the spill must be contained and tested as soon as possible to determine if it is contaminated. If testing confirms contamination, it shall be removed by a licensed regulated waste transporter. If testing confirms that the water is not contaminated, it shall be released in an appropriate manner.

28.3.5.5 *Fire Management*

A Fire Management Plan will be prepared for the Project and will be integrated into the Activity MPs. At a minimum, it will address fire scenarios most likely to occur on-site, including combustion and refuelling.

To minimise the risk of fire, the following measures will be adopted for the Project site and incorporated into project design:

- Provision of firefighting equipment throughout the Project site in accordance with AS 1851 Fire Safety and the Queensland Fire and Rescue Services (QFRS);
- All firefighting equipment to be kept and maintained in accordance with AS 1851-2005 Maintenance of fire protection systems and equipment;
- Clear access to fire extinguishers and hydrants maintained at all times;
- Fire suppression systems installed and used on equipment and machinery;
- Fire safety procedures outlined for construction and operational phases, and to be included in site inductions and staff training;
- Fire and evacuation plans and training to consist of:
 - A set of procedures for personnel of a works area / building to follow in the event of a fire;
 - Evacuation signs that must be displayed prominently throughout the site/building;
 - Instructions to personnel about evacuation procedures and actions they are to take in the event of fire threatening the area/building;
- Provision of firefighting equipment within the marina, in accordance with AS 3962-2001 Guidelines for the design of marinas, and the QFRS Guidelines for Firefighting facilities for marinas, including:
 - Fire hose reels (no berth should be beyond the reach of a fully extended reel and at least two reels should be accessible from each berth);
 - Fire hydrants will be located throughout the marina adjacent to the head of each gangway;
 - Fire extinguishers will be provided in appropriate locations;
 - Smoke alarms will be installed in all buildings, vessels, and structures; and
- Full evacuation exercise carried out as required by the Building Fire Safety Regulation 2008 at least annually.

In the event of a fire on-site, the available firefighting equipment shall be used by trained site staff to extinguish the fire. If this is unsuccessful, QFRS shall be contacted immediately.

28.3.6 EM Compliance and Auditing Procedure

The Site Manager is responsible for the implementation of the EM Framework throughout all areas and phases of construction. If the Site Manager is made aware of an incident or non-compliance, a corrective action report is to be completed. Any corrective actions and preventative measures outlined in the corrective action report should be commenced within 24 hours of the notification of incident or non-compliance.

The corrective action report must be approved by the Site Manager and is to include the following information at a minimum:

- Date and time;
- Details of non-conformance;
- Who inspected the non-conformance;
- What corrective action was undertaken;
- What prevention action was undertaken to avoid it recurring;
- Date the corrective action and preventative measures were carried out;
- Who inspected the corrective and preventative actions, and when; and
- Details of any communication with relevant authorities.

Some incidents/events will require further assessment to establish whether the EM Framework has been implemented appropriately, whether the EM Framework is adequate, and whether the work is compliant with all relevant legislation and guidelines. In some instances, further monitoring may also be required. In such scenarios, the TAP will be consulted to conduct the investigation and monitoring. Once the immediate issue has been resolved, relevant parties will be notified which may include DCCEEW and relevant state agencies.

If an event, incident, or emergency results in the release of contaminants (or some other action) not in compliance with the conditions of the relevant approval for the Project, notification must be made to the appropriate authority or regulatory body. The notification must include (but not be limited to) the following:

- Name of the approval holder;
- Number of the relevant approval;
- Location of the event/incident/emergency;
- Name and contact number for the designated contact person;
- Date and time of the release;
- Date and time the Site Manager was notified/aware of the release;
- Suspected cause of the release;
- Any environmental harm that was caused, threatened, or suspected to be caused by the release; and
- Any actions that have been undertaken to prevent further release and/or to mitigate any environmental harm that was caused by the release.

28.3.6.1 Audits

An audit checklist and reporting template will be developed and utilised across all MPs. This checklist and report template will be used to audit and assess the Project activities and site operations against the EM Framework. It will be used to ensure the EM Framework is being appropriately implemented. It will also provide opportunity to identify any areas for improvement within the site activities, or within the EM Framework.

The HSE Manager will conduct this audit weekly. Following each audit, the EM Framework will be reviewed, and the adequacy of existing controls assessed. If changes to management measures are required, the Site Manager will be notified, and a report provided to the Proponent outlining suggested changes. Relevant parties will then be contacted to review changes as required, this may include the TAP, DCCEEW or State agencies.

The HSE Manager will compile and review these audits and develop an annual summary report detailing all non-compliance and resulting changes that occurred to the EM Framework (and why), non-compliances that occurred, and any other items of interest.

28.3.7 Reporting Procedure

A monthly progress report will be prepared by the Site Manager (or nominated person) and submitted to Walker Group Holdings. The progress report will include (but not be limited to) summaries on the following:

- Weekly environmental performance – e.g. compliance, corrective actions, etc.;
- Environmental training performed;
- Results of the weekly internal audits;
- Any non-conformances, incidents, including performed or proposed actions for remediation, or improvement of procedures; and
- Any open non-conformances, and their status.

28.3.7.1 Annual Compliance Reporting

The EM Framework and all subordinate MPs will be reviewed annually (more frequently, if required) for compliance with all Project conditions, and for effectiveness of the mitigation measures and monitoring programme/s. The annual compliance report (ACR) will review and assess whether the EM Framework is achieving the objectives. The ACR will take account environmental monitoring records, corrective actions, and the results of any audits. If any amendments have been made from, the reasons for the changes will be documented.

The Site Manager and HSE Manager will be responsible for the ACR and provide it to Walker Group Holdings (as the approval holder). All outcomes relevant to the MNES MPs and management of impacts to MNES will then be reported to DCCEEW.

28.3.8 Adaptive Management

As the Project will be constructed over a period of up to 20 years and uses will persist for the foreseeable future, it is not realistic or possible for prescriptive management measures to be applied for the full construction period, or ongoing use of the site. Ongoing monitoring programs may find impacts differ from what has been predicted. New information on species and habitat including improved management techniques are also likely to become available over the duration of the Project. As a result, it is imperative that site management is flexible and can be modified during the construction period.

To reflect this, an adaptive management approach will be adopted which will allow future research and best practice development can be included and integrated into the management, mitigation, and monitoring of the Project (see Figure 28-4).

MPs will be reviewed on an annual basis or more frequently in response to any non-compliances to ensure they are utilising the most up-to-date information and management techniques. The outcomes of the review including any modifications made to the MPs will be addressed through the ACR, which will be made publicly available. A TAP made up of recognised leaders in their technical fields will oversee the review process and ensure changes to the management program utilise the most up-to-date industry knowledge.

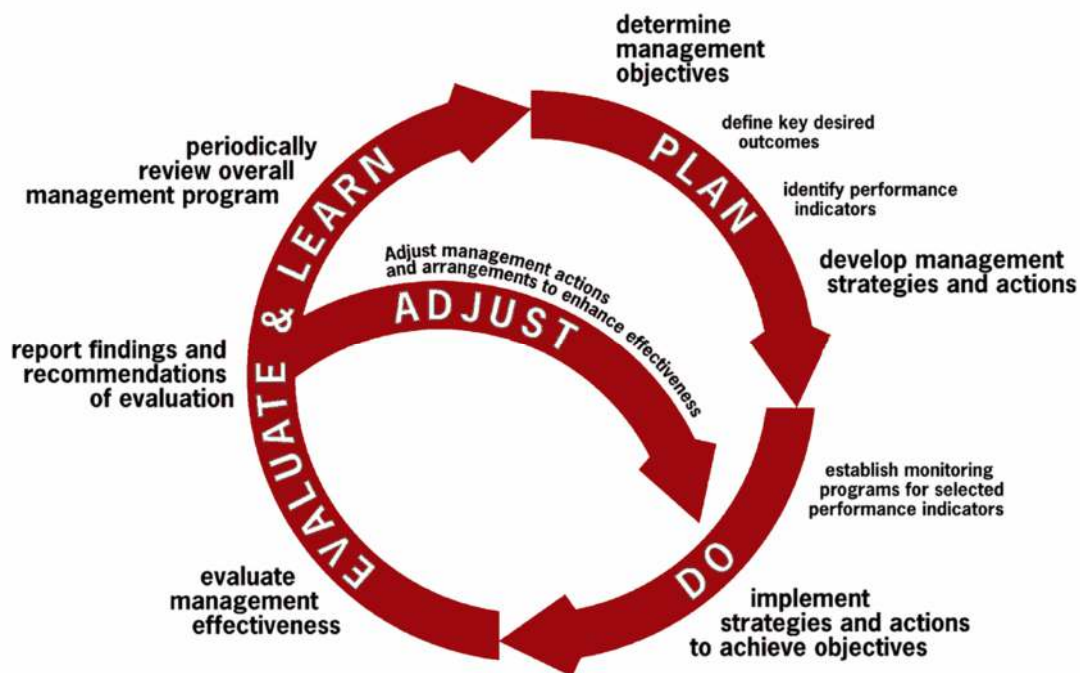


Figure 28-4: Adaptive Management Process (source: CSIRO).

28.4. Draft MNES Management Plans

MPs have been drafted for each overarching MNES category and will be further developed as the approvals are progressed, as follows:

- Threatened and Migratory Terrestrial Species Management Plan;
- Threatened and Migratory Shorebird Species Management Plan;

- Threatened and Migratory Marine Species Management Plan; and
- Ramsar Site Management Plan.

The overall environmental objective for all MNES MPs is to avoid direct and indirect impacts during the Project (other than those identified through MNES significant impacts assessments in Chapters 25, 26 and 27) to important populations, occupancy, critical habitat, breeding cycle, and to avoid the introduction of invasive species or disease.

The following performance criteria will be applicable to all MNES MPs:

- No loss of habitat critical to a MNES outside of the Project footprint.
- No mortality or injury to an MNES species within or outside of the Project footprint.
- No impact to an important population of a MNES outside of the Project footprint.
- No impact to the breeding cycle of a MNES outside of the Project footprint.
- No introduction of an invasive species or disease detrimental to a MNES.

Monitoring, reporting, and corrective actions for each of the MNES MPs will be developed as per the EM Framework (Section 28.3.6 and 28.3.7) and will be finalised to meet requirements under relevant legislation and approvals.

For each MNES MP, mitigation measures (related to a potential impact to that MNES) are outlined and the timing and responsibility for that mitigation measure. Mitigation measures are organised into sub-plans based on technical discipline, such as water quality, air quality, groundwater. Draft measures have been taken from the technical studies completed for the project and described in Volume 2 of the Draft EIS.

The Draft MNES MPs are contained in Appendix 3-C and will be further developed when the EPBC Approval is granted, and in response to specific State Government approval requirements.