



Australian Government

**Department of Infrastructure, Transport,
Regional Development and Communications**

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Dear Mr Tragotsalos

Cumulative Impacts Plan

I write to notify you that, in accordance with Condition 42 of the Airport Plan, I have today approved the Cumulative Impacts Plan (Rev J) submitted by WSA on 13 April 2022. Thank you for WSA Co's engagement with the department over the last few months as this plan was developed.

Now that the Cumulative Impacts Plan has been approved,

- a. WSA Co is required:
 - i. To take reasonable steps to ensure that each person involved in carrying out a development that is part of the Stage 1 Airport Development is informed of, and complies with, the approved Cumulative Impacts Plan (Condition 45(1) of the Airport Plan).
 - ii. To maintain accurate records demonstrating implementation of, and compliance with, the approved Cumulative Impacts Plan, and other applicable conditions contained in the Airport Plan. Records must be made available to the Infrastructure Department on request (Condition 46 of the Airport Plan).
 - iii. Unless otherwise agreed by an Approver, to publish the approved Cumulative Impacts Plan on its website (Condition 50 of the Airport Plan).
- b. Sydney Metro is required:
 - i. To take reasonable steps to ensure that each person involved in carrying out a development that is part of the Rail Development is informed of, and complies with, the approved Cumulative Impacts Plan (Condition 45(3) of the Airport Plan).
 - ii. To publish information in a report about its compliance with the conditions set out in section 3.11.6 of the Airport Plan and its implementation of the approved Cumulative Impacts Plan (Condition 47 of the Airport Plan).
 - iii. To ensure that an independent audit of its compliance with the conditions set out in section 3.11.6 (except Condition 44) and condition 46 of the Airport Plan is conducted, by an approved independent auditor, in respect of the 12-month period commencing with commencement of Rail Construction Works. The independent audit report must be submitted to the Infrastructure Department, with a copy provided to the Environment Department, within six months of the end of the period in respect of which the audit was conducted (Condition 48 of the Airport Plan).

Official

A copy of this approval letter has been sent to Ben Armstrong, Associate Director Environment Operations, Customer & Place Making, Sydney Metro for their information. If you have any queries in relation to this letter, please do not hesitate to contact me.

Yours sincerely



David Jansen
Assistant Secretary
Western Sydney Airport Regulatory Policy Branch

19 April 2022



Western Sydney Airport

Cumulative Impacts Plan

March 2022



**Western
Sydney
Airport**

Document Control

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WSA00-WSA-00400-EN-PLN-000013	Cumulative Impacts Plan	00

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0	19/04/2022	Approved	WSA	L. Laughton and T. Hindmarsh	D. Jansen

Report Authorisation

Position	Name	Signature	Date
Environment Manager	Leanne Laughton		

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Glossary, abbreviations, and definitions

Item	Definition
AEPR	<i>Airports (Environment Protection) Regulations 1997</i>
AEO	Airport Environment Officer - Means a person appointed under AEPR 2.01
AEW	Advanced and Enabling Works
Airport	The airport located at the Airport Site. Note: The Airport is referred to in the Act as Sydney West Airport and commonly known as Western Sydney Airport
Airport Lease	An airport lease for the Airport granted under section 13 of the Act
Airport Plan	Means the airport plan for the airport site as determined by the Infrastructure Minister under section 96B of the Airports Act in December 2016 as varied from time to time in accordance with the Airports Act.
Airport Site	The site for Sydney West Airport as defined by the Airports Act.
Airports Act	<i>Airports Act 1996 (Cth)</i>
ALC	Airport lessee company (WSA Co. Limited)
AS/NZS	Australian Standard/ New Zealand Standard
Approved Plan	Means a plan approved in accordance with the Conditions of Approval
Bulk Earthworks	The large-scale earthworks required to obtain the necessary site profile levels for the Stage 1 area in preparation for further construction works as described in section 6 of the Construction Plan
CEMF	Construction Environmental Management Framework
CEMP	Means a Construction Environmental Management Plan (CEMP) required under a condition in Section 3.10.2 of the Airport Plan
CICG	Cumulative Impacts Control Group
CIP	Cumulative Impacts Plan
CIZ	Construction impact zone – the part or parts of the Airport Site or an Associated Site on which Main Construction Works are planned to occur, as detailed in the Construction Plan approved in accordance with Condition 1 of the Airport Plan. Note: In accordance with the definitions and terminology of the Airport Plan, this CIP differentiates between the CIZ as the area for WSA-related main construction works and a Rail Construction Impact Zone (RCIZ) as the area for SM-WSA related rail construction works. The RCIZ includes areas within and outside of the CIZ.
Condition	A condition set out in Part 3 of the Airport Plan in accordance with section 96C of the Airports Act.
CSEP	The Community and Stakeholder Engagement Plan (CSEP) required under Condition 15 in Section 3.10.2 of the Airport Plan
Cth	Commonwealth
EIA	Environmental impact assessment – refers to the EIA prepared in relation to the Sydney Metro – Western Sydney Airport under the EPBC Act.
EIS	Environmental impact statement – refers to the EIS prepared in relation to the Western Sydney International Airport under the EPBC Act.
Environment Minister	The minister responsible for the EPBC Act.
EPA	NSW Environment Protection Authority

Item	Definition
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
DAWE	Department of Agriculture, Water and Environment (Commonwealth)
DIPNR	Guideline for the Preparation of Environmental Management Plans
Infrastructure Department	The department responsible for administering the Airports Act, currently the Australian Government Department of Infrastructure, Transport Regional Development and Communications (DITRDC)
Infrastructure Minister	The Minister responsible for the Airports Act from time to time
ISO 14001	AS/NZS ISO 14001:2015 Environmental Management System
MAP	Million annual passengers
Main Construction Works	Substantial physical works on a particular part of the Airport Site (including large scale vegetation clearance, bulk earthworks, civil works and the carrying out of other physical works, and the erection of buildings and structures) described in Part 3 of the Airport Plan, other than TransGrid Relocation Works or Preparatory Activities.
Non-conformance	Failure to conform to the requirements of the Airport Plan including approved plans.
Preparatory Activities	Preparatory Activities mean the following: <ul style="list-style-type: none"> a. day to day site and property management activities. b. site investigations, surveys (including dilapidation surveys), monitoring, and related works (e.g., geotechnical, or other investigative drilling, excavation, or salvage). c. establishing construction work sites, site offices, plant and equipment, and related site mobilisation activities (including access points, access tracks and other minor access works, and safety and security measures such as fencing but excluding bulk earthworks). d. enabling preparatory activities such as: <ul style="list-style-type: none"> i. demolition or relocation of existing structures (including buildings, services, utilities, and roads). ii. the disinterment of human remains located in grave sites identified in the European and other heritage technical report in volume 4 of the EIS; and iii. application of environmental impact mitigation measures; and e. any other activities which an Approver determines are Preparatory Activities for this definition
Project, the	Stage 1 Development and Rail Development of the Western Sydney International (Nancy-Bird Walton) Airport (WSI)
Rail Construction Impact Zone	The part or parts of the Airport Site or an Associated Site outside of the Construction Impact Zone on which Rail Construction Works are planned to occur, as detailed in the Construction (Rail) Plan approved in accordance with Condition 38 of the Airport Plan.
Rail Development	The Sydney metro – Western Sydney Airport development described in Part 3 of the Airport Plan.
RAP	WSA Co Limited Western Sydney Airport Remediation Action Plan prepared by GHD dated June 2019
SBT	Station Boxes and Tunnelling
SCAW	Surface Civil and Alignment Works
SEMF	Site Environmental Management Framework
SES Officer	A Senior Executive Service employee under the Public Service Act 1999 (Commonwealth)

Item	Definition
SM-WSA	Sydney Metro – Western Sydney Airport, the entity responsible for constructing and operating the Sydney Metro – Western Sydney Airport rail development in accordance with the Airport Plan.
SSTOM	Stations Systems, Trains, Operations and Maintenance
Stage 1 Development	The Western Sydney International Airport development described in Part 3 of the Airport Plan.
Sustainability Plan	Means a Sustainability Plan required under a condition in Section 3.10.5 General Condition 29 of the Airport Plan which must be submitted within six months of the granting of an Airport Lease for approval by the Approver.
TBM	Tunnel Boring Machine
WSI	Western Sydney International (Nancy Bird Walton) Airport. <i>Note: Under the Airports Act the Airport is referred to as Sydney West Airport</i>
WSA	WSA Co Limited (ACN 618 989 272), the entity responsible for constructing and operating the Airport in accordance with the Airport Plan. For the purposes of the Airports Act 1996 (Cth), WSA is the “airport-lessee company” for WSI.

1. Introduction

1.1. Background and context

In April 2014 the Australian Government announced that the Commonwealth-owned land at Badgerys Creek would be the site for a second Sydney Airport. The Badgerys Creek airport site was selected following extensive studies completed over several decades. The Commonwealth will invest \$5.3 billion for the construction of Western Sydney International (Nancy-Bird Walton) Airport (WSI).

In December 2016, the Minister for Urban Infrastructure determined the Airport Plan which sets the environmental and planning authorisation for the development of Stage 1 of the WSIA. In May 2017, the Government announced that it would establish WSA to develop and operate the airport. WSA is responsible for constructing and operating WSI in accordance with the Airport Plan. WSA Co Limited (WSA) is wholly owned by the Commonwealth. Further details regarding WSA, including details in relation to the chairman and board, can be found online at the WSA website <https://westernsydney.com.au/>.

An Environmental Impact Statement (EIS) was prepared for the WSI in accordance with the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and *Airports Act 1996*. The EIS considered potential impacts during construction activities and operation of the Stage 1 Development and long-term development of the proposed airport. The Airport development is referred to within this plan as the 'Stage 1 Development'.

In 2019, an Environmental Impact Assessment (EIA) was prepared by Sydney Metro – Western Sydney Airport (SM-WSA) in accordance with the EPBC Act and the Airports Act. The EIA considered the potential impacts during construction activities and operation of the SM-WSA Rail Development within the WSI site and surrounding environment. The SM-WSA development is referred to within this plan as the 'Rail Development'.

Construction of the Stage 1 Development of the WSI commenced in 2018, and major construction of the SM-WSA Rail Development is anticipated to commence in 2022.

This Cumulative Impact Plan (CIP) has been prepared to meet the requirements of Condition 42 of the *Airport Plan for the Western Sydney Airport* (September 2021) and as WSA and SM-WSA's key environmental management document to manage the potential cumulative impacts arising from the concurrent construction of the Airport Stage 1 Development and the Rail Development. This document pulls together the various aspects considered in both environmental impact assessments and sets out a framework for managing cumulative impacts. The purpose of this CIP is described in Section 1.2.

1.1.1. Airport Stage 1 development

The WSI is being developed in stages to match demand and include planning for services and amenities that are easily expandable over time, providing scalable capacity for aircraft, passengers, cargo, and vehicle movements.

The Stage 1 Development includes major site preparation, removing or relocating infrastructure from the site and earthworks to prepare the Airport Site (referred to in this plan as WSI), establishing the WSI with a single 3.7-kilometre runway located in the north-western portion of the WSI, a terminal and other support facilities to provide for an initial operational capacity of approximately 10 million regional, domestic and international passengers per year (MAP), growing to 82 MAP as well as freight traffic by 2050.

The scope of works for the Stage 1 Development is defined in the Airport Plan and includes the investigation, design, construction, and commissioning of:

- Bulk earthworks to move and redistribute 26 million cubic metres of material at the WSI.
- A single 3.7-kilometre runway.

- Aprons, taxiways, and other airside pavements.
- A multi-user terminal.
- Appropriate airport and aviation support facilities.
- Experience centre and site office.
- Drainage and utilities infrastructure; and
- Car parking, on-site roads, and other appropriate landside facilities.

The area that will be directly impacted by airport construction works (the Construction Impact Zone (CIZ)) covers approximately 1,199 hectares. It should be noted that the CIZ differs to the Rail CIZ (RCIZ), which is the area directly impacted by rail construction works.

Construction activities for the Stage 1 Development will involve:

- Site preparation activities including the clearing and earthworks elements of the Main Construction Works. The earthworks have involved the relocation of around 1.9 million cubic metres of topsoil and 26 million cubic metres of subsoil and rock to create a level site for the Stage 1 Development.
- Aviation infrastructure activities such as construction of the runway, taxiways, apron areas, internal road network, the terminal complex, ground-based augmentation system facility, freight, cargo and maintenance facilities and a fuel farm; and
- Site commissioning activities at the completion of the aviation infrastructure activities, involving testing and commissioning of all facilities in readiness for the operation of the proposed airport.

Construction of the Stage 1 Development commenced in 2018, with many of the early site preparation works including major bulk earthworks, completed.

Refer to the WSA Construction Plan for more details regarding the construction activities related to the Stage 1 Development.

1.1.2. Rail development

The SM-WSA will service Greater Western Sydney by providing a link between St Marys through to the new airport and the Western Sydney Aerotropolis. The SM-WSA comprises components that are located outside WSI airport (off-airport) and components that are located within WSI airport (on-airport).

In September 2019, the Commonwealth Infrastructure Minister referred the on-airport components of the SM-WSA to the Commonwealth Environment Minister. The SM-WSA EPBC Act Final Environmental Impact Assessment of on-airport proposed action (EPBC 2019/8541) was prepared to identify the potential impacts associated with the on-airport construction activities and operation. The EIA was endorsed by the Commonwealth Department of Agriculture, Water, and the Environment (DAWE) and formed part of the conditions of the Airport Plan. The Airport Plan was varied and approved in September 2021 to provide authorisation for the sections of the SM-WSA rail line to be built on the WSI site.

The on-airport Rail Development of SM-WSA, that is the works occurring on-airport land, comprises the following key features:

- Around two kilometres of surface rail alignment within WSI.
- Around 3.3 kilometres of twin rail tunnels (including tunnel portal) within WSI.
- Two new metro stations.
- A rail tunnel and viaduct segment factory comprising a concrete batch plant and stockpile area; and
- A spoil stockpile area.

The rail construction works will be undertaken both within and outside of the CIZ in an area referred to as the RCIZ. The RCIZ can be found in the WSA-SM Construction (Rail) Plan.

1.1.3. Cumulative Impacts definition

Cumulative impacts are defined as impacts caused from the activities carried out by or on behalf of WSA and SM-WSA concurrently, in relation to the construction of the WSI and SM-WSA respectively, which are greater than the impacts of only one of these developments being constructed, and which:

- a) are the subject of investigation by the Airport Environment Officer; or
- b) are the subject of complaints from third parties; or
- c) are likely, if not addressed, to place WSA or SM-WSA in breach of its obligations under the relevant regulations or conditions of an Approval relating to:
 - i. Air quality
 - ii. Noise
 - iii. Water quality (surface water and groundwater)
 - iv. Vibration
 - v. Night works (out-of-hours)
 - vi. Traffic changes due to cumulative impacts of construction of the initial airport development (WSA) and initial rail development (SM-WSA).

Cumulative impacts also include offsite impacts arising from the construction of the WSI and SM-WSA.

1.2. Document purpose

This CIP has been prepared by WSA to support the Stage 1 Development and Rail Development of the WSI and to comply with Condition 42 of the Airport Plan (September 2021), which is the authorising document for works arising from the concurrent construction of the Airport Stage 1 Development and the Rail Development. This CIP sets out the following items outlined under Condition 42(3):

- Coordination and consultation requirements between the following stakeholders as relevant to manage the interface of projects under construction at the same time: WSA, SM-WSA, Transport for NSW, Western Parkland City Authority, Sydney Water, emergency service providers and utility providers.
- The responsibility for management of the impacts set out in this CIP.
- The relevant environmental management framework relating to construction of the Airport Stage 1 Development and the Rail Development; and
- The process for proactively identifying and managing cumulative impacts.

The Airport Plan condition 42 (1) also stipulates *“The Rail Authority must not commence Rail Construction Works until a Cumulative Impacts Plan has been approved in accordance with this condition.”*

The CIP includes the high-level identification of construction activities and associated potential cumulative impacts that may result from concurrent construction activities of the two projects.

This CIP provides a framework for the identification and assessment of potential cumulative impacts. The CIP adopts where possible existing WSA and SM-WSA management systems including the tools,

processes, and controls, for the identification and management of potential cumulative impacts. The CIP also includes processes to identify and implement additional controls where necessary.

The environmental management system frameworks for WSA and SM-WSA are described in Section 1.4.1 and 1.4.2, respectively.

1.2.1. CIP coordination

In accordance with Airport Plan Condition 42(3)(b) and to ensure a consistent and agreeable approach to the development of this CIP for both WSA and SM-WSA, various consultation workshops have been undertaken. In addition to the listed consultation activities, briefing sessions for other stakeholders have also been undertaken. A summary of the consultation activities undertaken is provided in Table 1.

Table 1 Coordination activities during the preparation of this CIP

Activity	Stakeholders	Consultation summary
CIP Working Group	WSA and SM-WSA	Provide an update of the preparation of this CIP and to discuss implementation strategy.
Construction coordination workshop	WSA and SM-WSA	Review of the proposed WSA and SM-WSA construction programs and identify the activities that will overlap and may result in potential cumulative impacts.
Risk assessment workshop	WSA and SM-WSA	Review of the overlapping WSA and SM-WSA construction packages to assign a pre-mitigation risk rating. The risk assessment workshop used a process of risk management to determine untreated risk, current risk after treatment and target risk after treatment. The risk assessment workshop served as an example of the risk assessment process to be undertaken during the CIP Implementation Process.
Incident and emergency response workshop	WSA and SM-WSA	Workshop to discuss and review the emergency response outcomes and the potential cumulative impacts that have the potential to arise from emergency events.
CIP Implementation Process workshop	WSA and SM-WSA	Workshop to discuss and agree on the CIP Implementation Process.
Roles, responsibilities, and monitoring workshop	WSA and SM-WSA	Workshop to discuss and agree on the relevant roles and responsibilities for this CIP, and any additional monitoring requirements as part of the CIP Implementation Process.
CIP Briefing workshop	WSA and SM-WSA	Workshop to brief the first draft of the CIP to SM team
CIP response to comments workshop	WSA and SM-WSA	Workshop to discussion and close out SM comments on the draft CIP

1.3. CIP structure

A description of each section within this CIP and its content is provided in Table 2 below.

Table 2 CIP document structure

Section	Summary
1. Introduction	Section 1 provides a background to the WSI and SM-WSA project, CIP, WSA and SM-WSA EMS frameworks, and outlines the coordination activities undertaken during the preparation of this CIP.
2. Scope	Section 2 provides a summary of the scope of works to be undertaken during WSA and SM-WSA project activities.
3. Legal and other requirements	Section 3 outlines the legislation, guidelines, Airport Plan conditions and other legislative requirements relevant to this CIP.
4. Roles and responsibilities	Section 4 outlines the key WSA, SM-WSA and contractor roles and responsibilities to support the identification and management of cumulative impacts and implementation of this CIP.
5. Potential Cumulative Impacts	Section 5 provides a summary and discussion of the potential cumulative impacts associated with construction activities of WSA and SM-WSA.
6. Consultation and coordination with stakeholders	Section 6 outlines the consultation requirements for the implementation of this CIP, and the forums in which consultation with external stakeholders will be undertaken.
7. CIP Implementation Process	Section 7 outlines the processes for the implementation of this CIP.
8. Incidents and emergencies and complaints management	Section 8 outlines the processes to manage incidents, emergencies and complaints related to cumulative impacts.
9. CIP monitoring, assurance, and reporting	Section 9 outlines the monitoring, assurance, and reporting tools to measure the effectiveness of the CIP Implementation Process and improvement of cumulative impacts management.
10. Competency, training, and awareness	Section 10 outlines the competency, training, and awareness requirements for the implementation of this CIP.

1.4. Environmental Management Systems overview

This CIP contains system components which are required in addition to WSA and SM-WSA EMSs for the purposes of managing potential cumulative impacts and are aligned to work in collaboration with the existing management systems. These components supplement, and form part of, the below outlined management systems and for example include:

- Cumulative Impacts Risk Assessment Framework
- Cumulative Impacts Implementation Form and process map
- Cumulative Impacts quarterly look ahead schedule
- Meetings
- Cumulative Impacts Complaints and Incident Procedure

1.4.1. WSA Environmental Management System overview

WSA operates in general accordance with AS/NZS ISO 14001:2015 – Environmental management systems. A copy of the WSA environmental policy is provided in Appendix A of the Site Environmental Management Framework (SEMF).

WSA SEMF is the overarching environmental framework for the Project and describes a systematic approach to manage and control environmental risks associated with the Stage 1 Development construction works. It identifies environmental requirements applicable to the various construction activities to ensure environmental impacts are minimised and legislative and other obligations are fulfilled. The WSA SEMF also contains the procedures and permits used to govern the WSI site.

In addition, nine Construction Environmental Management Plans (CEMPs), a Sustainability Plan and a Community and Stakeholder Engagement Plan (CSEP) have been prepared and approved to support the SEMF. The CEMPs identify requirements and processes applicable to specific environmental aspects and impacts (e.g., air quality, traffic, and noise) of the proposed construction activities and address Airport Plan conditions and mitigation measures, controls and monitoring requirements defined in the EIS and Airport Plan. The structure of the SEMF and its interaction with corresponding management plans is shown below.

The structure of the environmental management system for the Stage 1 Development is shown in Figure 1.

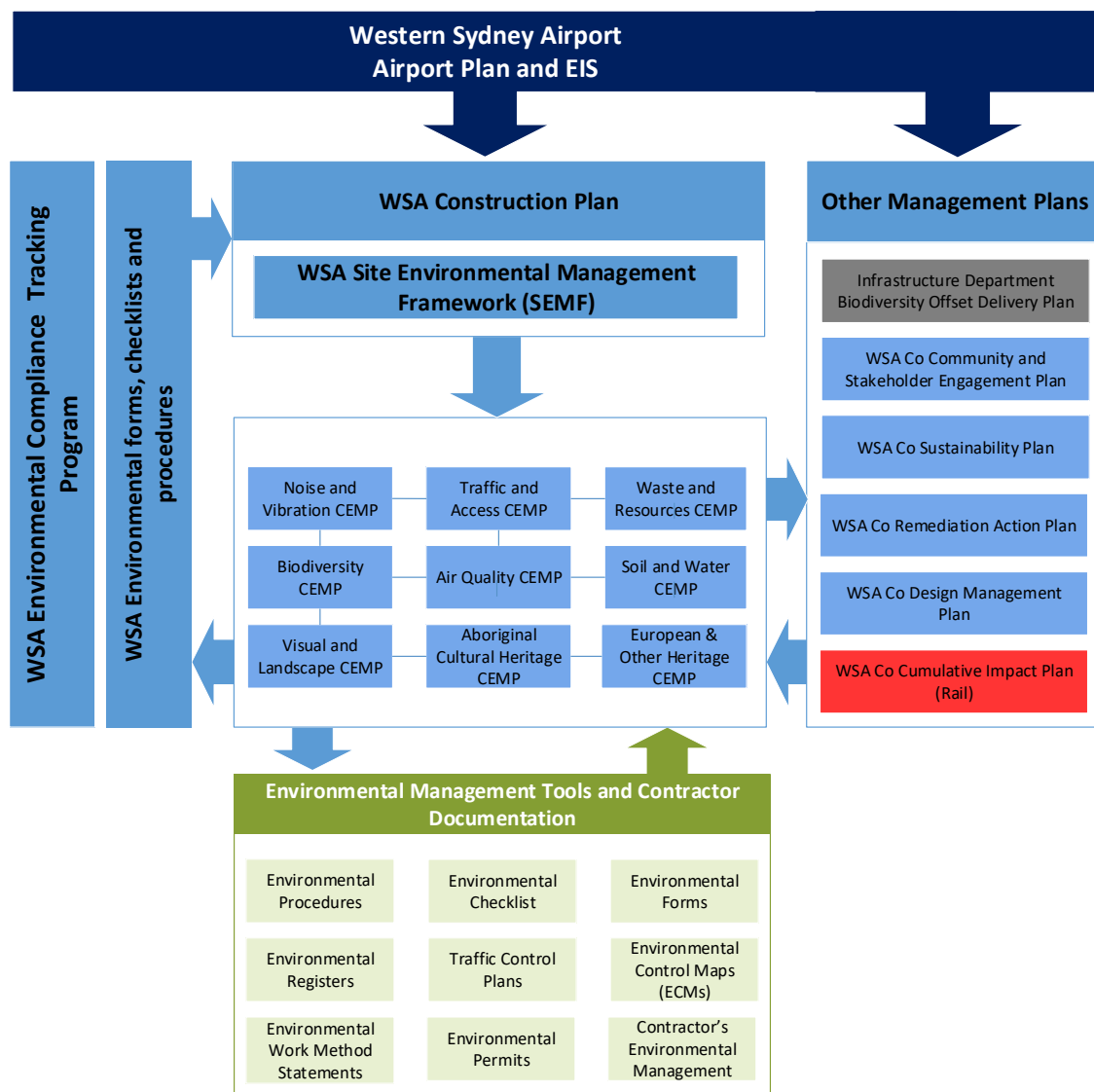


Figure 1 WSA Environmental Management System structure

1.4.2. SM-WSA Environmental Management System overview

SM-WSA operates in general accordance with AS/NZS ISO 14001:2015 – *Environmental management systems*. A copy of the SM-WSA environmental policy is provided in Appendix A of the Construction Environmental Management Framework (CEMF).

SM-WSA’s CEMF is the overarching environmental plan for the implementation of the nine CEMPs. It provides a structured and systematic approach to environmental management and provides an expectation and guidance with regards to environmental management for the overall construction of the Rail Development.

The Rail Development will be undertaken in accordance with the SM-WSA Construction (Rail) Plan and the SM-WSA CEMF, WSA SEMF and the associated CEMPs. Additionally, both the SM-WSA CEMF and the WSA SEMF form an appendix to the SM-WSA Construction (Rail) Plan.

The structure of the environmental management system for the Project is shown in Figure 2.

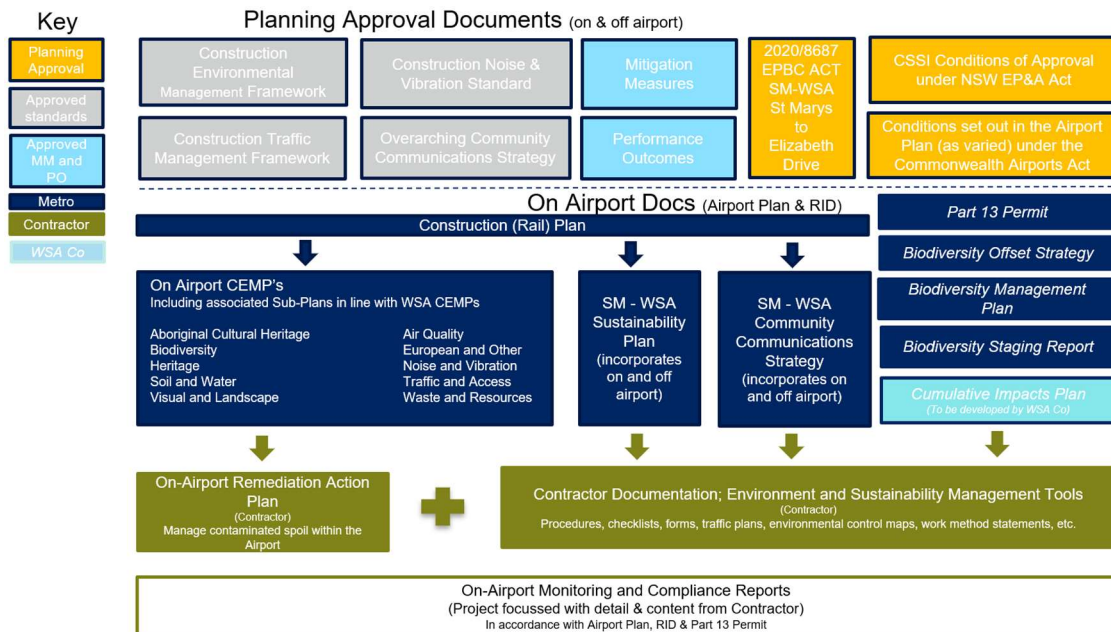


Figure 2 SM-WSA Environmental Management System structure

1.5. Objectives and targets

Where potential cumulative impacts are identified WSA and SM-WSA will implement the processes and protocols outlined in this CIP.

As a means of assessing the implementation and performance of this CIP during construction, objectives and targets have been established. These objectives and targets have been developed to be consistent with the Airport Plan condition requirements and consider key issues identified through the environmental assessment and risk assessment process.

The aspect specific objectives and targets are incorporated into the Construction Plan, CEMPs, and other approved plans. Performance against the objectives and targets will be documented in the Airport Plan condition compliance reports and at least on an annual basis as part of the management review.

Objectives and targets for the implementation of this CIP are provided in Table 3.

Table 3 CIP Objectives and Targets

Objective	Target	Measurement tool
To meet the full range of requirements identified in this Plan and the Airport Plan relating to cumulative impacts.	Full compliance. Cumulative Impacts Plan training for all personnel relative to roles and responsibilities	Bi-annual audits Annual and monthly compliance reporting Monthly CIP meetings (WSA, SM-WSA) Annual compliance report
To ensure that all identified cumulative impacts and issues are appropriately managed and mitigated during construction, including through the identification of contingencies should unexpected adverse outcomes occur, or control measures are found to be inadequate.	No regulatory infringements.	Quarterly Review Weekly inspections Monitoring requirements in accordance with the CEMPs Bi-annual audits Annual and monthly compliance reporting
To promote continual improvement in cumulative impacts performance.	Identify and address non-conformances and corrective actions within specific timeframes. Implementation of the continuous improvement process review at every CIP Quarterly Review. Training to be delivered to communicate lessons learnt, and process review and updates for cumulative impacts	Quarterly Review Monthly Interface Meetings Complaints and incident reports Annual compliance reporting
To ensure that controls are properly implemented, regularly monitored, and audited to assess their effectiveness.	Full compliance with implementation of agreed monitoring and inspection requirements as developed during the CIP Implementation Process.	Quarterly Review Weekly inspections Monitoring requirements in accordance with the CEMPs Bi-annual audits Compliance reporting Complaints, incidents, and emergencies registers
To ensure processes identified fully capture the intent of the CIP.	All cumulative impacts are captured.	Monthly and quarterly reports on cumulative impacts raised, addressed and numbers identified following incident/event notifications.
All CIs identified are appropriately managed and mitigated.	No failure to manage identified cumulative impacts. No regulatory infringements.	Annual Compliance Report Quarterly CIP meeting
Mitigation measures identified are adequate to manage identified cumulative impacts.	No additional impacts occur as a result of cumulative impacts or failed mitigation measures.	Annual compliance Report, listing cumulative impacts raised and addressed.
Inclusion of stakeholders.	CIP processes adequately addresses requirement and inclusion of stakeholders. Respond to cumulative impact notification within 24 hours and investigation outcomes within five business days.	Complaints and incident reports tracked at monthly, quarterly, and yearly meetings.
To manage cumulative impacts collaboratively.	WSA and SM-WSA representatives in attendance at all CIP meetings. Incidents and complaints closed out within the specified timeframes.	Annual Report Complaints and Incidents Reports

1.6. Certification and approval

This CIP has been reviewed and approved for issue by the WSA Environment Manager prior to submission to the Department of Infrastructure, Transport, Regional Development and Communications (Infrastructure Department). This CIP has been sent to the Infrastructure Department for approval as per the Airport Plan requirement in Section 3.2.1.

1.7. Review or amendment of Approved Plans

As the Stage 1 Development and Rail Development works will be completed in phases, this CIP will be updated as required to reflect the progressive construction phases as needed. In accordance with Condition 42 of the Airport Plan, any updates to the CIP will be submitted to the appropriate regulatory authority for approval.

This CIP is an Approved Plan, as defined by the Airport Plan and therefore is subject to the review and amendment conditions outlined in Condition 49 of the Airport Plan. This CIP will be reviewed by the WSA Environment Manager every 12 months in consultation with SM-WSA to ensure that this CIP continues to meet the approval criteria and a report must be prepared, as specified in Condition 49(5) of the Western Sydney Airport Plan. If this CIP does not continue to meet the approval criteria within three months of the provision of the report, WSA in consultation with SM-WSA must prepare in accordance with Condition 49 and submit for approval under sub condition 49 (1), a variation to ensure it continues to meet the approval criteria.

1.8. Distribution

All WSA and SM-WSA personnel and contractors will have access to this CIP via the respective project document control management systems. Unless otherwise agreed by the Approver, the approved Plan must be published on WSA's website within one month of being approved and be available until the end of the Construction Period. An electronic copy of this CIP can be found on the project website - <https://westernsydney.com.au>

This document is uncontrolled when printed. One controlled hard copy will be maintained by the Quality Manager at the WSA project office.

2. Scope of works

A summary of the project activities that will be undertaken by WSA during the Stage 1 Development and by SM-WSA during the Rail Development are outlined in Sections 2.1 and 2.2, respectively. An indicative illustration of the WSA and SM-WSA work areas is provided below in Figure 3.

The delivery of the Stage 1 Development and Rail Development will be undertaken through a packaging strategy with a variety of package sizes, risk profiles, and contracting entities. Each package will have different levels of environmental risk and environmental obligations, depending on the scope of works, location of works and sensitivity of the receiving environment and cultural heritage issues and relevant statutory requirements and obligations.

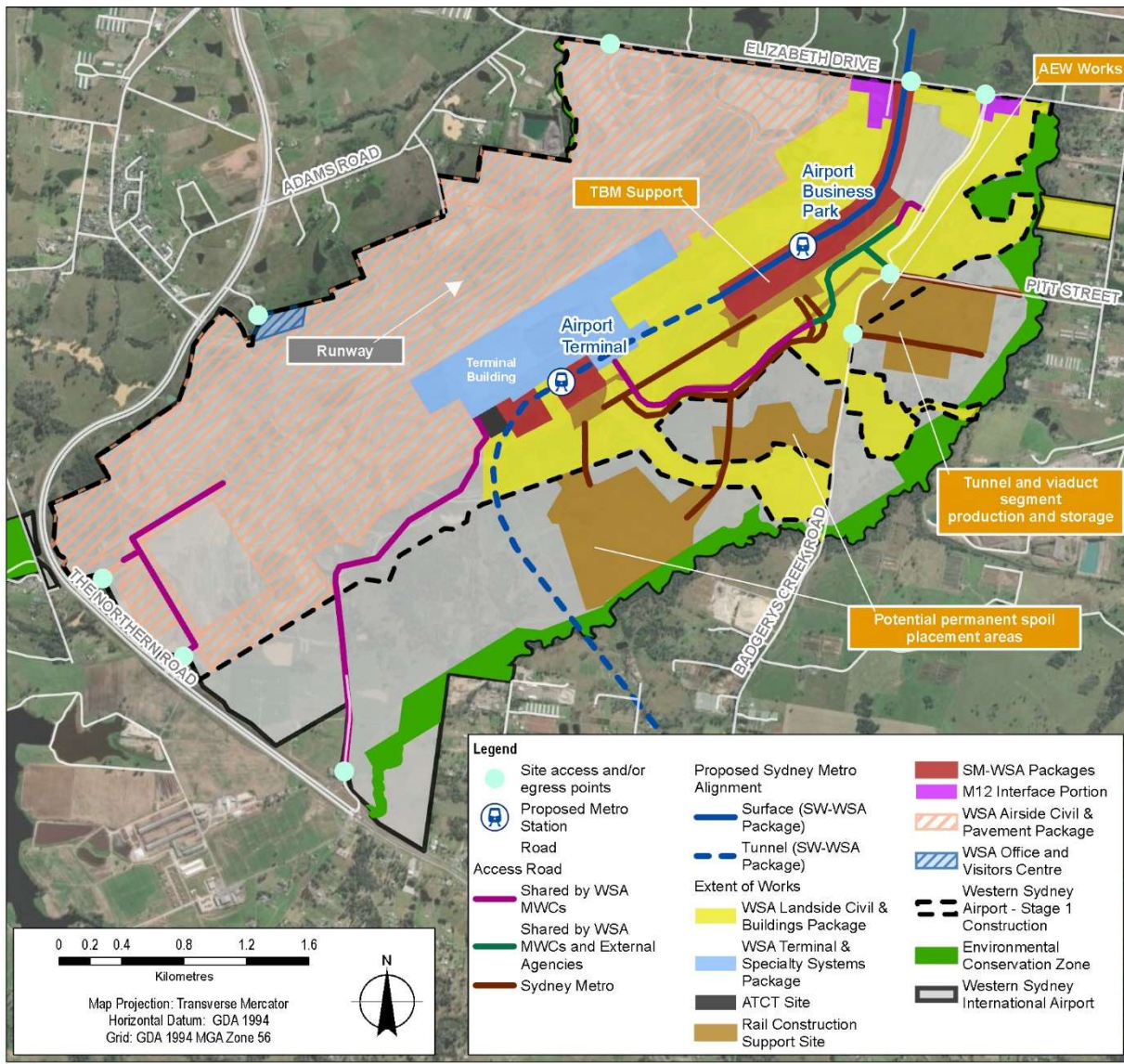


Figure 3 Indicative WSA and SM-WSA construction footprint within the WSI

2.1. Project activities of WSA

The delivery packages for the Stage 1 Development are as follows:

- Early Earthworks (completed 2020).
- Experience Centre and Site Office (completed 2020).
- Bulk Earthworks.
- Airside Civil and Pavement.
- Terminal and Specialty Services Works; and
- Landside Civil and Building including M12 on-airport works.

A summary of the current and proposed works for each delivery package is provided below.

2.1.1. Bulk Earthworks

The major earthworks package, the Bulk Earthworks Contract, were in the final stages of completion at the writing of this plan with the major earthworks completed. The Bulk Earthworks scope includes the delivery of:

- Site clearance.
- Management of asbestos contaminated soils and other contaminated material in accordance with the Remediation Action Plan (2019).
- Bulk Earthworks, including approximately 26 million cubic metres of cut and fill.
- Topsoiling; and
- Preliminary trunk drainage infrastructure.

2.1.2. Airside Civil and Pavement

The indicative Airside Civil and Pavement Works scope includes the delivery of:

- Runway construction, which must be 3,700 metres in length with Code F capability.
- Construction of a single full-length parallel taxiway, taxiway system and apron taxi lanes designed to facilitate the safe and efficient movement of aircraft.
- Airside roadways, including perimeter roads, airside roads and other roads required for efficient movement of vehicles and the safe inspection and maintenance of all WSI site infrastructure.
- Security fencing, including civil works provisioning for services such as CCTV and lighting.
- Aeronautical ground lighting and associated equipment rooms.
- Aircraft isolation pad and engine run-up bay.
- Sitewide high voltage, fibre optic backbone and potable water services; and
- Civil works provisioning for utilities and services required for the operation of WSI.

2.1.3. Terminal and Speciality Services Works

The Terminal and Specialty Services Works scope includes the construction of a multi-storey international and domestic terminal which is integrated with all ground transport and will be located between the Stage 1 Development runway and future second runway site. The indicative Terminal and Specialty Services Works scope includes, but is not limited to, the delivery of:

- Kiosk, bag drop, security, emigration/immigration, quarantine inspection services, baggage handling facilities, baggage claim, security screening, departure lounges, commercial tenant areas, back of house facilities and car rental facilities.

- Capacity for dedicated retail services and currency exchange, including associated infrastructure for storage, back-up facilities, goods delivery access, logistics and security screening); and
- Information technology, baggage handling, security and surveillance and all other systems required to effectively support efficient airport processes and operations.

Specialty works include aircraft aprons fixed link bridges, aerobridges, specialist aviation infrastructure/ equipment, aviation fuel ring main and technical equipment room buildings not already included in the scope of the Bulk Earthworks or the Airside Civil Works.

2.1.4. Landside Civil and Building

The indicative Landside Civil and Buildings scope includes the delivery of:

- The access and internal roads, including their connections to external road networks where applicable.
- Car parks (covered and uncovered – except those included in the Terminal and Specialty Works package).
- Connections to external utilities services and their distribution within the airport, including:
 - Potable water.
 - Wastewater.
 - Recycled water; and
 - Gas.
- Various ancillary facilities:
 - Water/wastewater facility.
 - Waste disposal facility.
 - Airport ground maintenance facility.
 - Access control point facility.
 - Offices.
 - Maintenance facilities and mechanical workshop.
 - Flammable and hazardous materials storage area.
 - Utilities buildings.
 - Emergency operations centre.
 - Landscaping; and
 - Facility security fencing (where required).

The Landside Civil and Building work area also includes aspects of on-airport works to support the construction of the M12, north of the WSI. The indicative on-airport M12 works would include:

- Construction of south facing ramps (inbound and outbound) from the single point interchange at Elizabeth Drive
- Northwest intersection (left-in and left-out) connection Elizabeth Drive with the WSI northwest access road west of the single point interchange; and
- Northeast intersection southern leg connecting the realigned Elizabeth Drive with Badgerys Creek Road.

Refer to the WSA Construction Plan for more details regarding the construction activities related to the Stage 1 Development. An overview of the WSA construction footprint within the WSI is provided in Figure 3.

2.2. Project activities of SM-WSA

The delivery packages for the Rail Development are as follows:

- Advanced and Enabling Works (AEW).
- Surface Civil and Alignment Works (SCAW).

- Station Boxes and Tunnelling (SBT); and
- Stations Systems, Trains, Operations and Maintenance (SSTOM).

A summary of the proposed works for each delivery package is provided below.

2.2.1. Advanced and Enabling Works

AEW will establish key construction sites and facilitate construction activities. The indicative AEW scope includes the delivery of:

- Detailed site investigations and subsequent clearance works.
- Provision of construction haul roads.
- Relocating, adjusting, and protecting utilities and services affected by the proposed action.
- Supplying power, water and other utilities to construction sites and other areas within the construction footprint.
- Vegetation clearance (as required); and
- Establishment of construction sites.

2.2.2. Surface Civil and Alignment Works

The indicative SCAW scope would involve corridor and associated works to establish around two kilometres of surface rail alignment within WSI.

Earthworks would be required along the proposed alignment to achieve required levels for the surface track alignment and for drainage structures and water quality basins. The general sequence for earthworks would be as follows:

- Ground stabilisation works as required.
- Construction of bored pile wall or similar infrastructure where required.
- Earthworks cut and fill to design levels;
- Construction of retaining structures and drainage elements where required as the earthworks progresses; and
- Construction and operation of a segment manufacturing facility to manufacture Bridge and Viaduct segments.

SCAW would also involve the establishment of a rail segment factory comprising a concrete batch plant and stockpile area, and a spoil stockpile area.

2.2.3. Station Boxes and Tunnelling

SBT works involve the establishment of around 3.3 kilometres of twin rail tunnels (including tunnel portal) within WSI

SBT works involve a bored tunnel approach utilising a tunnel boring machine (TBM) in each tunnel. The lining for the tunnel would be assembled from precast concrete segments and installed progressively as the TBM individual moves forward. The precast concrete tunnel segments, will be manufactured on-site using concrete from a dedicated concrete batching plant and stored at a tunnel segment precast facility, located at the airport construction support site.

The indicative SBT works scope include the delivery of:

- Construction of a tunnel portal and dive structure about 400 metres southwest of Airport Business Park Station.
- Launch of the TBMs from the Western Sydney International tunnel portal construction site and driven south-west towards the Airport Terminal construction site.
- Removal of tunnel spoil from the WSI tunnel portal and Airport Terminal construction sites.

- Maintenance of the TBMs west of the Airport Terminal Station box.
- Disassembly and retrieval of the TBMs from a temporary shaft excavated at the Aerotropolis Core construction site at the completion of tunnelling.
- Construction and operation of a segment manufacturing facility to manufacture TBM lining segments.
- Construction of an access shaft south of Airport Terminal station, to facilitate launching the TBM(s) with associate supports; and
- Operation of a Water Treatment Plant (WTP) supporting SBT activities

Tunnelling and associated works would also require surface construction areas for logistics support and material handling to support TBM operations including plant and material delivery, power and water supply, drainage and water treatment plant, grout plants, fresh air ventilation, spoil handling, stockpiling and removal facilities, workforce facilities and an acoustic shed is required.

2.2.4. Station Systems, Trains, Operations and Maintenance

The SSTOM works package involve the establishment of two new metro stations, Airport Business Park Station and Airport Terminal Station, and the installation of all operational systems and infrastructure.

The indicative station and associated works scope include the delivery of:

- Surface station construction at the Airport Business Park Station.
- Cut-and-cover construction for the Airport Terminal Station.
- Mechanical and electrical fit out of the stations including the rail systems at the station and the services required for the function of the stations.
- Rail systems fit out including ventilation, track slab and rail fastening, rail track installation, fixing and welding, cable and equipment installation, and overhead wiring.
- Architectural fit out of the stations occurring upon completion of the station structural works,
- Precinct and transport interchange works for Airport Business Park Station and Airport Terminal Station as part of the wider development of WSI; and
- Finishing works, testing, and commissioning.

Refer to the SM-WSA Construction (Rail) Plan for more details surrounding the construction activities related to the Rail Development. An overview of the SM-WSA work areas within the WSI is provided in Figure 3.

3. Legal and other requirements

Relevant environmental legislation and other requirements for this CIP are identified below.

3.1. Relevant legislation, guidelines, and standards

The WSI is to be developed under the Airport Plan determined under the Airports Act, and therefore some state laws will not be applicable to the Project (s112 of this Act). Where state law is applicable, this Plan will set out the relevant applicable state legislation and requirements and demonstrate how compliance with those laws has been established. Where state laws are not applicable, there may nonetheless be a requirement to have regard to those laws, for example, through mitigation measures to be incorporated in CEMPs or CIP to satisfy conditions under the Airport Plan.

3.1.1. Legislation

Legislation and regulations to this Plan are summarised in Table 4.

Table 4 Principal legislation and relevance

Legislation or regulation	Relevance	CIP compliance
<i>Airports Act 1996 (Cth)</i> (Airports Act)	The Airports Act and AEPRs set out the framework for the regulation and management of activities at airports that could have potential to cause environmental harm. This includes offences related to environmental harm, environmental management standards, monitoring, and incident response requirements. The Airport Plan prepared under the Airports Act covers several environmental matters and details specific measures to be carried out for the purposes of preventing, controlling, or reducing the environmental impact associated with the airport. Criminal offences are applicable if these measures are not complied with.	Compliance of this CIP with the relevant Airport Plan conditions is provided in Section 3.2.1. Additionally, this CIP forms part of the overall WSA and SM-WSA environmental management systems which has compliance with the Airport Plan as outlined in the WSA SEMF and SM-WSA CEMF.
<i>Airports (Environment Protection) Regulations 1997 (AEPR)</i>	Imposes a general duty to prevent or minimise environmental pollution once an airport lease is granted. Promotes improved environmental management practices at airports.	Refer to commentary on Airport Plan above.

Other legislation relevant to the individual projects is outlined within the WSA SEMF and associated CEMPS.

3.1.2. Guidelines and standards

Relevant guidelines and standards for this CIP and which are required for the appropriate management of environmental impacts and construction activity monitoring are outlined in Table 5 below.

Table 5 Guidelines and standards relevant to this CIP

Environmental aspects	Guidelines and standard
Air quality	<ul style="list-style-type: none"> • AS 2922 Ambient Air Guide for Siting of Sampling Equipment • AS 3580.1.1-2007 Methods for Sampling and Analysis of Ambient Air – Guide to Siting Air Quality Monitoring Equipment • AS 3580.10.1-2003 Methods of Sampling Analysis of Ambient Air • Air Quality Monitoring Criteria for Deposited Dust (DEC Guideline) • Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC 2005) • Draft Clean Air Strategy 2021-30 (EPA, 2021) • Guidance on the assessment of dust from demolition and construction (UK Institute of Air Quality Management (IAQM)2014) • Managing particles and improving air quality in NSW (EPA 2013)
Noise and vibration	<ul style="list-style-type: none"> • The Australian and New Zealand Environment Conservation Council (ANZECC) guideline – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC, 1990) • NSW Interim Construction Noise Guideline (ICNG) (DECC 2009) • Noise Policy for Industry (2017) • NSW Assessing Vibration: A Technical Guideline (DE 2006) • German DIN 4150-3: Structural Vibration: Effects of Vibration on Structures
Water quality (including surface water and groundwater)	<ul style="list-style-type: none"> • Acid Sulfate Soil and Rock – Victorian EPA Publication 655.1 – July 2009 • Acid Sulfate Soil Manual (ASSMAC 1998) • Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC 2000 Guidelines) • The Heads of EPAs Australia and New Zealand (HEPA), PFAS National Environmental Management Plan, January 2020 • Commonwealth Environmental Management Guidance on Perfluorooctane Sulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA), Draft - October 2016 • DEC: Environmental Compliance Report Liquid Chemical Storage, Handling and Spill Management Part B Review of Best Practice and Regulation November 2005 • Department of Environment and Conservation (DEC): Storage and Handling Liquids: Environmental Protection Participant’s Manual May 2007 • Fairfull, S. and Witheridge, G. (2003) Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings. NSW Fisheries • Guidelines for consultants reporting on contaminated sites (NSWEPA, May 2020) • Guidelines for the assessment and management of groundwater contamination (DEC 2007) • Guidelines on the duty to report contamination under the Contaminated Land Management Act 1997 (EPA 2015) • Managing Urban Stormwater: Soils and Construction. Landcom, (4th Edition) March 2004 (reprinted 2006) (the “Blue Book”). Volume 1 and Volume 2-2008 • National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended) • National Environment Protection (National Pollution Inventory) Measure 1998 (as amended) • National Water Quality Management Strategy • NSW EPA, 1995. Sampling design guidelines (EPA 1995) • NSW EPA, 2003. Guidelines for the vertical mixing of soil on former broad-acre agricultural land • NSW EPA, 2014. Waste classification guidelines. • NSW EPA, 2016. Addendum to the Waste Classification Guidelines (2014) Part 1: Classifying Waste, October 2016 (PFAS solid waste criteria) • NSW Fisheries Policy and Guidelines for Fish Habitat Conservation and Management (2013) • NSW Water Quality Objectives

Environmental aspects	Guidelines and standard
	<ul style="list-style-type: none"> • State Environmental Planning Policy No 52—Farm Dams and Other Works in Land and Water Management Plan Areas (NSW) • State Environmental Planning Policy No 55—Remediation of Land (NSW) • State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011 (NSW) • The Heads of EPAs Australia and New Zealand (HEPA), PFAS National Environmental Management Plan, January 2018 • WorkCover NSW Guidelines for managing asbestos in or on soil (March 2014)
Traffic and access	<p>Documents below and as updated by AustRoads:</p> <ul style="list-style-type: none"> • Austroads Guide to Road Safety – Part 6 (2009) Pre-opening scheme audit, • Austroads Guide to Road Safety – Part 6 (2009) Roadwork traffic scheme audit, and as updated by AustRoads • Austroads Guide to Road Safety – Part 6 (2009) Existing roads: road safety audit • Transport for NSW supplements to Austroads guidelines where relevant (http://www.rms.nsw.gov.au/business-industry/partners-suppliers/documenttypes/supplements-Austroads-guides/index.html) • Austroads Road Safety Audit Second Edition 2002: Checklist 4. Pre-opening scheme audit • Austroads Road Safety Audit Second Edition 2002: Checklist 5: Roadwork traffic scheme audit • Austroads Road Safety Audit Second Edition 2002: Checklist 6: Existing roads: road safety audit, and, as updated by AustRoads • AS 1742.3 Manual of Uniform Traffic Control Devices – Traffic control for works on roads • TfNSW QA Specification G10 – Traffic Management • TfNSW Traffic Control at Work Site manual • Austroads Guide to Traffic Management (RTA 2011) • Procedures for Use in the preparation of a Traffic Management Plan (RTA 2001) • Austroads Road Safety Audit Second Edition 2002: Checklist 4. Pre-opening scheme audit • TfNSW Supplements to Austroads and Australian standards • Sydney Metro Principal Contractor Health and Safety Standard • Traffic Control at Work Sites Technical Manual (TfNSW).

3.2. Approvals and other specifications

Approvals and other specifications relevant to this CIP include:

- Western Sydney Airport Plan (September 2021).
- Western Sydney Airport Environmental Impact Statement.
- WSA Site Environmental Management Framework and CEMPs.
- WSA Construction Plan.
- WSA Community and Stakeholder Engagement Plan.
- Sydney Metro – Western Sydney Airport EPBC Act Final Environmental Impact Assessment of on-airport proposed action (EPBC 2019/8541).
- Sydney Metro – Western Sydney Airport CEMF and CEMPs.
- Sydney Metro – Western Sydney Airport Construction Plan; and
- Sydney Metro – Western Sydney Airport Community Engagement Strategy.

3.2.1. Airport Plan conditions

The Airport Plan conditions relevant to this CIP are provided in Table 6 below. This CIP is an Approved Plan as defined by the Airport Plan and therefore compliance with the Airport Plan conditions is a statutory requirement.

Table 6 Relevant Airport Plan conditions

Condition No.	Condition	Timing	Responsibility	Where addressed in CIP
42.1	The Rail Authority must not commence Rail Construction Works until a Cumulative Impacts Plan has been approved in accordance with this condition.	Prior to Rail Construction Works	SM-WSA	Section 1.6
42.2	The Airport Lessee Company (ALC) must: a) Prepare; and b) Submit to an Approver for approval. A Cumulative Impacts Plan in relation to cumulative impacts arising from the concurrent construction of the Airport Stage 1 Development and the Rail Development.			
42.3	The criteria for approval of the Cumulative Impacts Plan are that an Approver is satisfied that the Cumulative Impacts Plan: a) Sets out:			
	i) Coordination and consultation requirements between the following stakeholders as relevant to manage the interface of projects under construction at the same time: the ALC, the Rail Authority, Transport for NSW, Western Parkland City Authority, Sydney Water, emergency service providers and utility providers;	Prior to Rail Construction Works	WSA	Section 6
	ii) The responsibility for management of the impacts set out in the Cumulative Impacts Plan;	Prior to Rail Construction Works	WSA	Section 4
	iii) The relevant environmental management framework relating to construction of the Airport Stage 1 Development and the Rail Development; and	Prior to Rail Construction Works	WSA	Section 1.4
	iv) The process for proactively identifying and managing cumulative impacts;	Prior to Rail Construction Works	WSA	Section 7
	b) Has been prepared in consultation with the Rail Authority; and	Prior to Rail Construction Works	WSA	Section 1.2.1
	c) Is otherwise appropriate.	Prior to Rail Construction Works	WSA	Section 1.2
42.4	Each of the Rail Authority and the ALC must not act inconsistently with the approved Cumulative Impacts Plan.	Post-approval	WSA and SM-WSA	Section 9

Condition No.	Condition	Timing	Responsibility	Where addressed in CIP
46	Each Site Occupier, the Rail Authority and each Plan Owner must maintain accurate records which demonstrates its compliance with the conditions, including measures taken to implement the Approved Plans, and must make the records available upon request to the Infrastructure Department.	Post-approval	WSA and SM-WSA	Section 7 and Section 9.
49.1	The Plan Owner may seek approval for a variation of an Approved Plan by submitting to an Approver a version of the plan with the proposed variation clearly marked in it (varied plan).	Post-approval	WSA Approver	Section 1.7
49.2	The criteria for approval of the varied plan are the same as those in the Approval Condition, but only to the extent that they are relevant to the proposed variation.	Post-approval	WSA Approver	Section 1.7
49.3	If an Approver approves a varied plan prepared under sub condition (1) or paragraph (6)(b), or the Infrastructure Minister varies an Approved Plan under paragraph (6)(a), then, from the date when it is approved or varied (as the case may be), the plan as varied is taken to be the Approved Plan for the purposes of the conditions.	Post-approval	WSA Approver	Section 1.7
49.4	The ALC must review each Approved Plan for which it is the Plan Owner every five years to ensure that the Approved Plan continues to meet the approval criteria for that plan. The ALC must provide a report on the review (which may be included in an annual report required under condition 47). If the plan does not continue to meet the approval criteria, within three months of the provision of the report, the ALC must prepare and submit for approval under sub condition (1) a variation to the Approved Plan to ensure it continues to meet the approval criteria.	Post-approval	WSA Approver	Section 1.7
49.5	Despite sub-condition (4), the ALC must review the Cumulative Impacts Plan every 12 months in consultation with the Rail Authority to ensure that the Plan continues to meet the approval criteria. The ALC must provide a report on the review (which may be included in an annual report required under condition 47). If the plan does not continue to meet the approval criteria, within three months of the provision of the report, the ALC in consultation with the Rail Authority must prepare and submit for approval under sub condition (1) a variation to ensure it continues to meet the approval criteria.	Post-approval	WSA Approver	Section 1.7
49.6	The Infrastructure Minister may: (a) vary an Approved Plan; or (b) request in writing that the Plan owner prepare and seek approval for a specified variation of an Approval Plan in accordance with sub condition (1),	Post-approval	Infrastructure Minister	Section 1.7

Condition No.	Condition	Timing	Responsibility	Where addressed in CIP
	<p>if the Infrastructure Minister believes on reasonable grounds that:</p> <p>(c) a condition has been contravened and the nature of the contravention is relevant to the subject matter of the Approved Plan; and</p> <p>(d) the variation of the request for a specified variation (as the case may be) will address the contravention.</p>			
49.7	The Plan Owner must comply with a request made by the Infrastructure Minister in accordance with sub condition (6) within three months of the date of the request.	Post-approval	WSA Approver	Section 1.7
49.9	Within two months of the grant of an Airport Lease, the ALC must prepare and submit for approval, in accordance with sub condition (1), a variation of each plan that was approved under a condition before the lease was granted, and for which the ALC is the Plan Owner, to reflect the change in Site Occupier resulting from the grant of the Airport Lease.	Post-approval	WSA Approver	Section 1.7
50.1	Unless otherwise agreed in writing by an Approver, the Plan Owner must publish all Approved Plans on its website.	Post-approval	WSA Approver	Section 1.8
50.2	<p>Each Approved Plan must be published on the Plan Owner's website within one month of being approved and remain so published:</p> <p>(e) for all other plans – until there is a Master Plan for the Airport.</p>	Post-approval	WSA Approver	Section 1.8

4. Roles and responsibilities

The key management roles and responsibilities for implementation of this CIP and management of potential cumulative impacts are outlined below. These roles and responsibilities are in addition to the roles and responsibilities detailed in the respective WSA and SM-WSA environmental management systems. For the purposes of the CI process, a CI Lead will be nominated to manage the process. This responsibility will be assigned based on the scope/source of the potential impact and the best role to manage it.

WSA and SM-WSA will ensure enough resources are allocated on an ongoing basis to ensure effective implementation by both WSA, SM-WSA and the responsible contractors.

4.1.1. External roles and responsibilities

Infrastructure Minister (or an SES employee in the Infrastructure Department)

- The Approver for the CIP.
- Approval for variation of an Approved Plan; and Administering and enforcing the Airports Act.

Airport Environment Officer

- Issue an environmental protection order in accordance with Part 7 of the AEPR; and
- Issue an infringement notice in response to an offence against the AEPR.

4.1.2. WSA roles and responsibilities

Chief Executive Officer (or as delegated)

- Provide resources to ensure compliance with CIP is achieved.
- Approve, or nominate a delegate, for the CIP for issue.
- Mandate and ensure that environmental protection remains an integral element of all Project activities.
- Provide the leadership and direction whereby environmental protection is and remains an integral element of all project activities; and
- Provide required resources to ensure the delivery of the CIP to manage the environment and prevent pollution.

WSA Environment Manager (or as delegated)

- Chair the CIP Quarterly Review interface meetings on an alternative basis with the SM-WSA Environment Manager.
- Contribute to the Monthly Construction Interface meetings.
- Coordinate and manage the preparation, update, and implementation of the CIP.
- Monitor the review and implementation of all environmental management requirements both legislative and as identified in the CIP.
- Ensure WSA, Delivery Partner and WSA Contractors comply with all obligations outlined in this plan.
- Ensure compliance of activities with the CIP.
- Implement, maintain, monitor, report and advise the Executive General Manager on all cumulative impact matters.
- Coordinate consultation with external parties as part of agreed forums.
- Liaise with the AEO and Infrastructure Department on cumulative impacts matters.
- Liaise with external stakeholders.

- Complete environmental reporting as required by the CIP to meet the Airport Plan requirements and submit to the Approver and stakeholders as required.
- Ensure that an appropriate environmental induction and training program is developed such that WSA personnel are aware of their environmental responsibilities under the CIP.
- Provide monitoring results to the SM-WSA Environment Manager to satisfy environmental reporting obligations.
- Ensure the timely review and assessment of environmental monitoring and inspection outcomes to ensure identification and implementation of continual improvement with regards to the management of cumulative impacts.
- Ensure that environmental records are maintained.
- Ensure that all cumulative impacts incidents, complaints, and events are reported, investigated and corrective action taken to prevent recurrence.
- Participate in regular inspections to ensure compliance with the CIP.
- Assist with environmental hazard and risk identification and elimination.
- Provide direction and guidance on implementation of the CIP.
- Monitor and take action to ensure cumulative impacts management requirements are implemented throughout the life of the project; and
Sign off Part 1 and 3 of the CIP Implementation Forms.

WSA Rail Interface Manager

- Coordinate monthly construction interface meetings with the SM-WSA Rail Interface Manager.
- Review outcomes of the CIP Quarterly Review and any cumulative impacts identified;
- Sign off Part 1 and 3 of the CIP Implementation Forms and distribute them accordingly via Aconex.
- Facilitate cumulative impacts risk assessments including identification and elimination.
- Ensure cumulative impacts outcomes from risk assessments and the cumulative impact assessments are documented.
- Coordinate and document consultation outcomes with external parties as part of agreed forums.
- Ensure cumulative impacts assessment outcomes and mitigation requirements from the CIP Implementation Process have been included within the relevant contractor work method statements and other documentation as required, and work with contractors to ensure control measures are implemented.
- Assist with the timely review and assessment of environmental monitoring, auditing, and inspection outcomes to ensure identification and implementation of continual improvement with regards to the management of cumulative impacts.
- Facilitate cumulative impacts incidents, complaints and events reporting and investigation; and
- Escalate issues to senior management related to cumulative impacts.

WSA Community and Stakeholder Manager

- Contribute to the CIP Quarterly Review and Monthly Construction Interface meetings.
- Responsible for the undertaking and documentation of consultation with external stakeholders for matters relating to cumulative impacts, in consultation with the SM-WSA Senior Communications Manager.
- Contribute to the sign-off of the CIP Implementation Form, as required.

- Ensure that community engagement initiatives are incorporated in the approach to cumulative impacts management.
- Maintain a complaint register related to cumulative impact.
- Liaise with SM-WSA for the communication of cumulative impacts incidents, complaints, and events; and
- Assist with cumulative impacts incidents, complaints and events reporting and investigation.

WSA Package Managers

- Ensure scheduling and construction information is available for cumulative impacts.
- May act as Cumulative Impacts Lead.
- Ensure project contractors comply with cumulative impacts agreements documented in CIP Implementation Forms.
- Monitor the implementation of the outcomes in signed CIP Implementation Forms.
- Participate in the monthly interface meetings.
- Participate in cumulative impacts risk assessments including identification and elimination; and
- Assist with cumulative impacts incidents, complaints and events reporting and investigation.

WSA Environment Rail Coordinator

- Participate in cumulative impact assessments.
- Review and endorse CIP Implementation Forms and distribute them to WSA and Contractors via Aconex.
- Review cumulative impact assessment documentation is correct and complete.
- Participate in monthly construction interface meetings with WSA Managers and Contractors.
- Coordinate cumulative impact documentation review by other WSA personnel.
- Participate in cumulative impacts risk assessments including the identification and elimination of risks.
- Assist with cumulative impacts incidents, complaints and events reporting and investigation.
- Coordinate cumulative impacts reporting between WSA and Contractors; and
- Provide as part of the environmental monthly reports, a summary of the management and compliance with the relevant to cumulative impacts management mitigation measures and controls.

WSA Contractors

- Share and participate in scheduled interface meetings about upcoming construction activities.
- Provide information to WSA Package Managers to inform about the CIP process.
- Sign off CIP Part 2 of the Implementation Forms and distribute them accordingly via Aconex.
- Comply with cumulative impacts agreements documented in CIP Implementation Forms.
- Facilitate monthly construction interface meetings (as required).
- Participate in cumulative impacts risk assessments including identification and elimination.
- Assist with cumulative impacts incidents, complaints and events reporting and investigation; and
- Provide as part of the environmental monthly reports, a summary of the management and compliance with the relevant to cumulative impacts management mitigation measures and controls.

4.1.3. SM-WSA roles and responsibilities

SM-WSA Senior Environment Manager

- Chair the CIP Quarterly Review interface meetings on an alternative basis with the WSA Environment Manager.
- Coordinate and manage the preparation and implementation of the CIP.
- Monitor the review and implementation of all environmental management requirements both legislative and as identified in the CIP.
- Ensure SM-WSA and SM-WSA Contractors comply with all obligations outlined in this plan.
- Ensure compliance of activities with the CIP.
- Implement, maintain, monitor, report and advise the Executive General Manager on all cumulative impact matters.
- Coordinate consultation with external parties as part of agreed forums.
- Liaise with the AEO and Infrastructure Department on cumulative impacts matters.
- Liaise with external stakeholders.
- Complete environmental reporting as required by the CIP to meet the Airport Plan requirements and submit to the Approver and stakeholders as required.
- Ensure that an appropriate environmental induction and training program is developed such that SM-WSA personnel are aware of their environmental responsibilities under the CIP.
- Agree with the WSA Environmental Manager on monitoring locations that delineate between the Stage 1 Development and Rail Development activities, with respect to air quality, noise, vibration, water quality (including surface water and groundwater) and heavy vehicle movements.
- Provide monitoring results to the WSA Environment Manager to satisfy environmental reporting obligations.
- Ensure the timely review and assessment of environmental monitoring and inspection outcomes to ensure identification and implementation of continual improvement with regards to the management of cumulative impacts.
- Ensure that environmental records are maintained.
- Ensure that all cumulative impacts incidents, complaints, and events are reported, investigated and corrective action taken to prevent recurrence.
- Participate in regular inspections to ensure compliance with the CIP.
- Assist with environmental hazard and risk identification and elimination.
- Provide direction and guidance on implementation of the CIP.
- Monitor and take action to ensure cumulative impacts management requirements are implemented throughout the life of the project.
- Implement additional environmental monitoring as identified during cumulative impacts assessment and review; and
- Include compliance with this CIP and the Airport Plan conditions relevant to cumulative impacts management within the Annual Report, to be prepared in accordance with Condition 47 of the Airport Plan.

SM-WSA Rail Interface Manager

- Coordinate monthly construction interface meetings with the WSA Rail Interface Manager.
- Act as the Cumulative Impacts Lead.
- Review outcomes of the CIP Quarterly Review and any cumulative impacts identified.

- Sign off CIP Parts 1 & 3 of the Implementation Forms and distribute them accordingly via Aconex.
- Facilitate cumulative impacts risk assessments including identification and elimination.
- Document cumulative impacts outcomes from risk assessments.
- Coordinate and document consultation outcomes with external parties as part of agreed forums.
- Assist with the timely review and assessment of environmental monitoring, auditing, and inspection outcomes to ensure identification and implementation of continual improvement with regards to the management of cumulative impacts.
- Facilitate cumulative impacts incidents, complaints and events reporting and investigation; and
- Escalate issues to senior management related to cumulative impacts.

SM-WSA Senior Communications Manager

- Contribute to the CIP Quarterly Review and Monthly Construction Interface meetings.
- Responsible for the undertaking and documentation of consultation with external stakeholders for matters relating to cumulative impacts, in consultation with the WSA Community and Stakeholder Manager.
- Contribute to the sign-off of the CIP Implementation Form, as required
- Ensure that community engagement initiatives are incorporated in the approach to cumulative impacts management.
- Maintain a complaint register related to cumulative impact.
- Liaise with WSA for the communication of cumulative impacts incidents, complaints, and events; and
- Assist with cumulative impacts incidents, complaints and events reporting and investigation.

SM-WSA Package Manager

- Share scheduling information at construction interface meetings with WSA regarding concurrent activities and the potential for cumulative impacts.
- Act as the Cumulative Impacts Lead.
- Ensure project contractors comply with cumulative impacts agreements documented in CIP Implementation Forms.
- Monitor the implementation of the outcomes in signed CIP Implementation Forms.
- Participate in the monthly interface meetings.
- Participate in cumulative impacts risk assessments including identification and elimination; and
- Assist with cumulative impacts incidents, complaints and events reporting and investigation.

SM-WSA Environment Manager

- Participate in cumulative impact assessments.
- Review and endorse CIP Implementation Forms and distribute them to WSA and Contractors via Aconex.
- Review cumulative impact assessment documentation is correct and complete
- Participate in monthly construction interface meetings with WSA Managers and Contractors.
- Coordinate cumulative impact documentation review by other WSA personnel.
- Participate in cumulative impacts risk assessments including the identification and elimination of risks.
- Assist with cumulative impacts incidents, complaints and events reporting and investigation.

- Coordinate cumulative impacts reporting between WSA and Contractors; and
- Provide as part of the environmental monthly reports, a summary of the management and compliance with the relevant to cumulative impacts management mitigation measures and controls.

SM-WSA Contractors

- Comply with contractual requirements related to the identification and management of cumulative impacts.
- Inform Package Managers and Interface Managers, on activities, to contribute information to others compiling CIP Form Part 1.
- Share Scheduling information at construction interface meetings, with WSA regarding concurrent construction Activities.
- Sign off Part 2 of the CIP Implementation Forms and distribute them accordingly via Aconex.
- Ensure Part 3 of the CIP Implementation Form has been signed by the nominated people (CI Lead, Interface Manager and Environment Managers).
- Comply with cumulative impacts agreements documented in CIP Implementation Forms.
- Facilitate monthly construction interface meetings (as required).
- Participate in cumulative impacts risk assessments including identification and elimination.
- Assist with cumulative impacts incidents, complaints and events reporting and investigation; and
- Provide as part of the environmental monthly reports, a summary of the management and compliance outcomes, as relevant to cumulative impacts management mitigation measures and controls.

5. Potential Cumulative Impacts

The extent to which a construction activity from the Stage 1 Development and Rail Development could interact with the other would depend on its scale, duration, location and/or timing of construction. Generally, cumulative impacts would be expected to occur in situations where multiple construction activities for one project are undertaken close to, and over a similar timescale to, construction activities for the other project. Cumulative impacts would also be expected to occur in situations where projects are operating at a similar scale to the proposed action.

This section outlines the construction activities for the Stage 1 Development and Rail Development that may occur concurrently throughout the construction period and provides a summary of the potential cumulative impacts for each cumulative impact aspect that may result from the construction activities. Cumulative impacts would be dependent on factors including the location, duration, type, timing, and magnitude of the works. These factors will be considered during the identification and assessment of potential cumulative impacts as part of CIP Implementation Process (refer to Section 7).

5.1. Initial Cumulative Impacts Assessment

An initial cumulative impacts risk assessment was undertaken by WSA and SM-WSA to identify the potential cumulative risks resulting from construction activities for the Stage 1 Development and Rail Development occurring concurrently. A construction coordination workshop and risk assessment workshop were held as part of the risk assessment process to:

- Identify the construction works packages occurring concurrently on a year-by-year basis.
- Identify the key interface activities within the construction works packages that have the potential to result in cumulative impacts; and
- Identify potential cumulative impacts related to the environmental aspects.

The workshops held during the preparation of this Plan to provide inputs into the initial cumulative impacts' assessment is described in Section 1.2.1

A high-level summary of the potential cumulative impacts identified during the risk assessment workshop, related to each key environmental aspect is provided in Sections 5.2 to 5.6.

5.2. Air quality

Construction activities for the Stage 1 Development and Rail Development have the potential to result in cumulative air quality and odour impacts on the surrounding environment and sensitive receivers.

Cumulative air quality and odour impacts may result from the following activities occurring concurrently across the CIZ and RCIZ:

- Site and delivery vehicles travelling on unsealed roads.
- Construction and operation of compound buildings and amenities.
- Transportation and delivery of heavy plant.
- Transportation, loading and unloading of materials.
- General waste handling.
- Constructing and operating site access roads.
- Use of heavy plant / multiple plant use.
- Civil works and ground exposure.
- Earthworks.
- Stockpiling of materials.
- Construction of temporary roads and bridges.

- Installation of temporary utilities.
- Construction of the tunnel portal.
- Operation of the TBM.
- Concrete batching plants and material stockpiling.
- Concrete works.
- Asphalt of roads and carparks.
- Landscaping; and
- Finishes trades include paints, glues, and waterproofing products.

Potential cumulative air quality impacts may include the following when the cumulative impacts are greater than impacts from a singular project:

- Dust deposition beyond site boundaries at levels greater than impacts from a singular project.
- Increased sediment tracking onto local roadways resulting in dust generation.
- Impacts to residents from dust migration and deposition.
- Additional odour impacts, including a higher concentration of odour levels, at sensitive receptors; and
- Increased risk of health effects due to an increase in dust emissions or exposure to particulate emissions.

Additionally, cumulative air quality impacts may be exacerbated through weather conditions such as dry weather and wind.

Air quality impacts associated with the construction activities of the individual projects are further documented in the respective CEMPs, as provided in Table 7.

Table 7 WSA and SM-WSA Air Quality CEMP references

Document name	Document number
WSA Air Quality CEMP	WSA00-WSA-00400-EN-PLN-000006
SM-WSA Air Quality CEMP	SM-21-00033303

5.3. Noise and vibration

Construction activities for the Stage 1 Development and Rail Development have the potential to result in cumulative noise and vibration impacts on the surrounding environment and sensitive receivers.

Cumulative noise and vibration impacts may result from the following activities occurring concurrently across the CIZ and RCIZ:

- Earthworks to construct compound footprint.
- Construction of compound buildings, carparks, and amenities.
- Compaction of materials.
- Transportation, loading and unloading of materials.
- Operation of site compound.
- Demolition of structures.
- Materials stockpiling.
- Piling works.
- Steel and concrete cutting.
- Milling and excavation of road surfaces.

- Concrete works.
- Operation of the concrete batching plant.
- Asphalt road and carpark works.
- Construction of the rail alignment.
- Construction of the tunnel portal.
- Construction of bored piled wall associated with the rail corridor.
- Use of TBM and tunnelling works.
- Track slab and rail fastening.
- Rail track installation, fixing and welding; and
- Construction of pre-cast facilities.

Potential cumulative noise and vibration impacts may include the following when the cumulative impacts are greater than of impacts from a singular project:

- Increased noise disturbances, including sleep disturbance, at sensitive receivers.
- Increased construction traffic noise along construction haulage routes.
- Increased vibration disturbances at sensitive receivers.
- Higher risk of structural damage due to increased vibration; and
- Increased duration of noise and/or vibration impacts on sensitive receivers.

Potential cumulative noise and vibration impacts associated with night works (out-of-hours) are described in Section 5.4.

Noise and vibration impacts associated with the construction activities of the individual projects are further documented in the respective CEMPs, as provided in Table 8.

Table 8 WSA and SM-WSA Noise and Vibration CEMP references

Document name	Document number
WSA Noise and Vibration CEMP	WSA00-WSA-00400-EN-PLN-000002
SM-WSA Noise and Vibration CEMP	SM-21-00033431

5.4. Night works (out-of-hours works)

Construction activities for the Stage 1 Development and Rail Development have the potential to result in cumulative night-time impacts on the surrounding environment and sensitive receivers.

Cumulative night works impacts may result from the following activities occurring concurrently across the CIZ and RCIZ:

- 24 hours works, including tunnelling works and associated spoil handling within the site; and
- Internal and external truck movements occurring out-of-hours for general spoil handling.

Potential cumulative night works' impacts may include the following when the cumulative impacts are greater than impacts from a singular project:

- Increased noise exceeding night-time criteria at sensitive receivers due to 24-hour work operations.

Cumulative impacts associated with night works (out-of-hour works) are typically related to the generation of noise and vibration from construction activities of the individual projects are further documented in the respective project CEMPs, as provided in Table 8 above.

5.5. Water quality (including surface water and groundwater)

Construction activities for the Stage 1 Development and Rail Development have the potential to result in cumulative water quality impacts on surface water and groundwater on the surrounding environment.

Cumulative water quality impacts may result from the following activities occurring concurrently across the CIZ and RCIZ:

- General civil works, including clearing and grubbing.
- Material stockpiling.
- Construction of waterway crossings.
- Concrete batching and associated concrete works.
- Temporary waste storage.
- Storage and use of fuels and chemicals onsite.
- TBM operation and associated tunnelling works.
- Piling.
- Terminal works and finishes.
- Dust suppression; and
- Dewatering.

Potential cumulative water quality impacts may include the following when the impacts are greater than of those from a singular project:

- Increased sedimentation levels in downstream waterways.
- Additional load on the water treatment system and subsequent decrease of water quality; and
- Increased sediment on local roadways resulting in offsite sedimentation impacts.

Water quality impacts associated with the construction activities of the individual projects are further documented in the respective CEMPs provided in Table 9.

Table 9 WSA and SM-WSA Soil and Water CEMP references

Document name	Document number
WSA Soil and Water CEMP	WSA00-WSA-00400-EN-PLN-000004
SM-WSA Soil and Water CEMP	SM-21-00033458

5.6. Traffic and access

Construction activities for the Stage 1 Development and Rail Development have the potential to result in cumulative traffic and access impacts on the surrounding environment and road network.

Cumulative traffic and access impacts may result from the following activities occurring concurrently across the CIZ and RCIZ:

- Site personnel travel to and from site
- Peak vehicle movements for the delivery of materials.
- Construction vehicles and plant utilising the local road network.
- Transportation of oversized deliveries.
- Concrete deliveries; and
- Removal of materials, such as spoil, from site.

Potential cumulative traffic and access impacts may include the following when the impacts are greater than of those from a singular project:

- Increased construction traffic resulting in increased congestion along construction haul routes, traffic delays, queuing at intersections and decreased safety.
- Increased construction traffic causing damage to the condition of the existing road network.
- Increased frequency of road closures and diversions; and
- Increased duration of traffic impacts on the local road network.

Traffic and access impacts associated with the construction activities of the individual projects are further documented in the respective CEMPs, as provided in Table 10.

Table 10 WSA and SM-WSA Traffic and Access CEMP references

Document name	Document number
WSA Traffic and Access CEMP	WSA00-WSA-00400-EN-PLN-000005
SM-WSA Traffic and Access CEMP	SM-21-00033455

6. Consultation and coordination with stakeholders

Consultation between WSA, SM-WSA and stakeholders has been identified in the Airport Plan as one of the key mechanisms to coordinate and manage the interface of the Stage 1 Development and Rail Development projects, and proactively identify and manage potential cumulative impacts arising from the concurrent activities.

The Airport Plan outlines the consultation requirements for the implementation of this CIP and is provided in Table 11 below.

Table 11 Airport Plan consultation requirements

Condition	Consultation requirement
42(3)(a)(i)	Co-ordination and consultation requirements between the following stakeholders as relevant to manage the interface of projects under construction at the same time, the ALC, the Rail Authority, Transport for NSW, Western Parkland City Authority, Sydney Water, emergency service providers and utility providers;

Existing and proposed consultation forums will facilitate the interface management of the Stage 1 Development and Rail Development during construction and will also allow for the proactive identification and management of cumulative impacts to mitigate and reduce potential impacts where possible.

Consultation with the relevant external stakeholders would be undertaken through, but not limited to, the established forums listed in Table 12.

Table 12 Consultation forums

Stakeholder	Forum
General Interface Meetings	<ul style="list-style-type: none"> Joint Project Integrator Meetings (monthly) Western Sydney Aerotropolis Transport Integration Hub (led by TfNSW – bi-monthly) WSA/SM-WSA/Transport for NSW/Utility providers/Emergency Services providers Traffic Coordination Group/Traffic and Transport Liaison Group (Led by WSA) (bi-monthly) Utilities Transport Working Group (led by the NSW Department of Planning, Industry and Environment) (quarterly) [TBC] Roads and Utilities Coordination Meeting (Western Parkland City, Infrastructure & Place (Transport for NSW)) (quarterly)
SM-WSA	<ul style="list-style-type: none"> Interface Meetings (weekly) Environmental and Planning Working Group (monthly) CIP Review (quarterly) Construction Interface Meetings
Transport for NSW	<ul style="list-style-type: none"> WSA/SM-WSA/Transport for NSW Environmental Interface Meeting (monthly) WSA/M12 Technical Interface Meetings (bi-weekly)
Western Parkland City Authority	<ul style="list-style-type: none"> WPCA/WSA Co-ordination Forum (monthly)
Sydney Water	<ul style="list-style-type: none"> Monthly coordination meeting
Emergency service providers	<ul style="list-style-type: none"> Regional Emergency Management Committee led by SES (quarterly)
Utility providers	<ul style="list-style-type: none"> Regular coordination meetings.



The WSA and SM-WSA Community and Stakeholder Engagement Plans outline their commitment to engaging with community stakeholders in an open, inclusive, accessible, and timely manner throughout the planning and delivery of this project.

7. CIP Implementation Process

The CIP Implementation Process is the key mechanism to proactively identify and manage cumulative impacts that may arise from the construction activities of the Stage 1 Development and Rail Development occurring concurrently.

The CIP Implementation Process, as illustrated in Figure 4 is broken up into three key elements to guide WSA, SM-WSA and Contractors in the identification and management of cumulative impacts, to outline the key responsibilities (refer to Table 13), and the consultation forums required to satisfy the requirements of the Airport Plan and other contractual agreements. The CIP implementation shall be coordinated, documented, and tracked via the CIP Implementation Process and CIP Implementation Form, described in Section 7.1

The three elements of the CIP Implementation Process are as follows:

- Part 1 – Cumulative impacts assessment (refer to Section 7.1.1)
- Part 2 – Cumulative impacts coordination and monitoring (refer to Section 7.1.2); and
- Part 3 – CIP Implementation Form sign-off (refer to Section 7.1.3).

The tools to support the implementation of cumulative impacts management and reporting are outlined in Section 7.2.

CIP Implementation Process Map

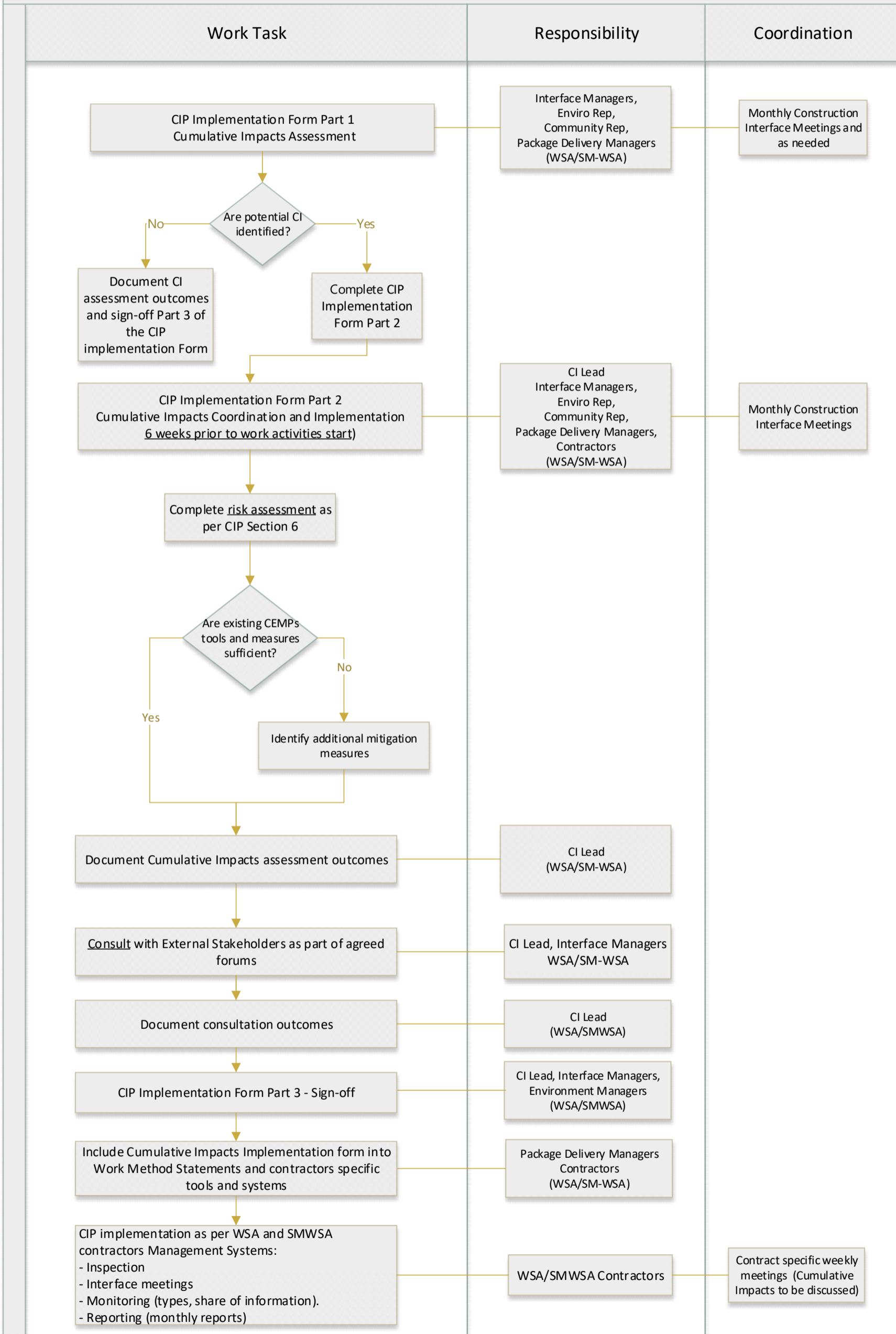


Figure 4 CIP Implementation Process Map

Table 13 CIP Implementation Process roles and responsibilities

Task	Responsibility for:		Contributors (WSA and SM-WSA)
	<i>Accountable (WSA)</i>	<i>Responsible (SM-WSA)</i>	
Part 1 – Cumulative Impacts Assessment	Environment Managers	Package Manager	Rail Interface Managers Communications and Stakeholder Managers Package Managers Contractors
Part 2 – Cumulative Impacts coordination and implementation	Rail Interface Managers	Contractors	Environment Managers Communications and Stakeholder Managers Package Managers Contractors
Documentation of Cumulative Impacts assessment outcomes	Rail Interface Managers	Contractors	As applicable
Consultation with external stakeholders	Communications and Stakeholder Managers	Contractors	Rail Interface Managers Environment Managers Package Managers Contractors
Documentation of consultation outcomes	Communications and Stakeholder Managers	Contractors	As applicable
Part 3 – CIP Implementation Form sign-off	Rail Interface Managers and Environment Managers	Contractors	Environment Managers Communications and Stakeholder Managers Package Managers Delivery Directors/ Project Managers Contractors
Inclusion of CIP Implementation Form details into relevant work method statements	Contractors, Rail Interface Managers and Contractors	Contractors	Rail Interface Managers Package Managers
CIP implementation	Contractors, Rail Interface Managers and Contractors	Contractors	Rail Interface Managers Environment Managers Package Managers

7.1. CIP Implementation Form

Cumulative Impacts shall be tracked via a CIP Implementation Form. The CIP Implementation Form includes the following:

- Part 1 – Cumulative Impacts assessment.
- Part 2 – Cumulative Impacts coordination and monitoring; and
- Part 3 – CIP Implementation Form sign-off.

The CIP Implementation Form will be completed by SM-WSA Contractor unless otherwise agreed, in close consultation with the WSA and SM-WSA Package Managers. The CIP Implementation Forms shall be signed off when satisfactory agreement is reached between WSA

and SM-WSA and their contractors. In the event an agreement cannot be reached the appropriate dispute resolution process will be adopted.

The CIP Implementation Form template can be found in Appendix B.

7.1.1. Part 1 – Cumulative Impacts assessment

A CIP Quarterly Review meeting will be held at the beginning of each quarter to:

- Review the proposed WSA and SM-WSA construction program to confirm specific overlapping construction activities.
- Identify any changes to the construction program that may decrease or increase the potential for cumulative impacts.
- Identify and assess the potential for cumulative impacts as a result from construction activities occurring concurrently.
- Define what contract packages and contractors are responsible for the interface and coordination of the cumulative impacts; and
- Review performance from the previous quarter for the purposes of continuous improvement.

This will be undertaken using a risk-based approach and document as outlined below.

Cumulative Impacts guidance

WSA and SM-WSA shall consider the criteria in Table 14 as a minimum and as guide for the identification and assessment of cumulative impacts.

Table 14 Cumulative Impacts Guidance

Aspect	What to consider
General	<ul style="list-style-type: none"> • Are the WSA and SM-WSA works near each other? • Are the WSA and SM-WSA works near identified sensitive receivers or sensitive environmental areas? • What are the nature of the works? • Will the works be external or internal of a building?
Air quality	<ul style="list-style-type: none"> • Will additional dust be generated? • Will additional odours be generated? • Will additional dust suppression be required? • Will the works be undertaken on sealed or unsealed ground? • Are the works going to be undertaken during a dry weather event? • Will the cumulative air quality levels have the potential to exceed acceptable air quality levels outlined in the CEMPs?
Noise	<ul style="list-style-type: none"> • Will the works be noisy works? • Will the cumulative noise levels exceed anticipated noise levels outlined in the CEMPs? • Will the duration of the works be longer than expected? • Will the works be undertaken during standard construction hours?
Vibration	<ul style="list-style-type: none"> • Will the works result in vibration impacts? • Will the cumulative vibration levels exceed acceptable vibration levels outlined in the CEMPs?

Aspect	What to consider
	<ul style="list-style-type: none"> • Will the duration of the works be longer than expected? • Will the works be undertaken during standard construction hours?
Surface water	<ul style="list-style-type: none"> • Are the works likely to result in additional surface water runoff requiring its capture, by water basins? • Is there potential for the additional water entering the water basins to be contaminated or polluted? • Will the existing water basins have sufficient capacity for additional water? • Will the works require a release of water from the basins into the drainage waterways?
Groundwater	<ul style="list-style-type: none"> • Are the works likely to intersect groundwater? • Are the works likely to require the abstraction and/or treatment of groundwater?
Traffic and access	<ul style="list-style-type: none"> • Will the works result in additional traffic movements? • Will the works generate light and heavy vehicle traffic along the same haulage routes at the same time? • Will work site access points be in close proximity? • Will the additional traffic movements be on-site or offsite? • Will additional temporary road changes to the local road network be required (e.g. road closures or diversions)? • Are the cumulative traffic generations forecast to result in peak and off-peak delays and queuing at locations across the road network, and how is it proposed to mitigate these impacts? • Will cumulative, traffic impacts result in accelerated deterioration of road condition?
Night works (out-of-hours works)	<ul style="list-style-type: none"> • Will the works be undertaken during out-of-hours? • Are the works located in close proximity to near sensitive receivers? • Will the works have cumulative noise or vibration impacts? • Will the works result in additional construction traffic movements (resulting in increased traffic noise)? • Are the works likely to result in additional light disturbance for sensitive receivers?

The outcomes of the assessment must be documented within Part 1 of the CIP Implementation Form.

If no potential cumulative impacts are identified, the CIP Implementation Form Part 3 can be signed off by the WSA and SM-WSA Interface Managers and distributed accordingly, as outlined in Section 7.1.3.

If potential cumulative impacts are identified, Part 2 of the CIP Implementation Process will be triggered, and Section 7.1.2 shall be followed.

7.1.2. Part 2 – Cumulative Impacts coordination and monitoring

Part 2 of the CIP Implementation Form is to be completed at least 30 business days prior to a construction works package commencing to allow for proper consultation and planning with regards to the management of cumulative impacts.

Monthly interface meeting will be held to enable regular communication between WSA and SM-WSA and their contractors during construction and will be the primary tool to document cumulative impacts coordination and monitoring. The objectives of the monthly interface meeting are to:

- Review programming changes and identify if different to the baseline as identified in the CIP Quarterly Review Meetings.
- Conduct or allocate responsibility for undertaking a risk assessment for concurrent construction work packages and identify if existing CEMP mitigation measures, controls and processes are sufficient to manage the risk, or if additional mitigation, measures, controls, and processes are required; and
- Identify if consultation with external stakeholders related to the management of cumulative impacts is required.

Cumulative Impact risk assessment

A risk assessment is required to be completed by SM-WSA and their contractors in collaboration with WSA, to determine the anticipated risk for cumulative impacts specific to the scope of works.

The key steps for the cumulative impacts risk assessment process are as follows:

1. Identify the construction activities occurring concurrently between WSA and SM-WSA for the relevant time period.
2. Identify and assess the potential cumulative impacts from construction activities, considering the criteria in Table 14.
3. Identify the control measures outlined in the relevant project CEMPs that will be applied for the construction activities.
4. Consider the hierarchy of controls including:
 - Eliminate
 - Substitute
 - Engineering Controls
 - Reduce
 - Isolate and
 - Administrative controls.
5. Using the CIP risk framework in Appendix A, determine the risk ratings for potential cumulative impacts relative to each aspect with the application of project CEMP control measures.
6. Identify if any additional mitigation measures for construction activities with a risk rating of medium or greater. These measures will be undertaken in addition to the control measures specified by the relevant project's CEMP.

Example of additional control measures are:

- Additional weekly inspections.
- Additional dust suppression controls
- To coordinate and schedule high impact activities to avoid cumulative impacts such as potential for increase in air quality/noise/vibration/water quality (including surface water and groundwater and/or

- Increased and/or additional monitoring and surveillance.
7. Document the outcomes of the cumulative impacts risk assessment within the CIP Implementation Form.

Consultation

Following completion of the risk assessment and identification and agreement of mitigation measures, consultation with external stakeholders for adjacent projects as outlined in Section 6 CIP consultation requirements will be undertaken. Outcomes from the coordination and consultation with stakeholders must be documented within Part 2 of the CIP Implementation Form.

7.1.3. Part 3 – Cumulative Impacts Implementation Form sign-off

Following completion of Parts 1 and/or 2, the form requires sign off as below

- **no potential cumulative impacts:** When Part 1 of the CIP Implementation Process identifies no cumulative impacts, Part 3 will be signed by the nominated CI Lead, appropriate Interface Manager, SM-WSA Environment Manger and WSA Environment Manager confirming the outcome of the assessment.
- **cumulative impacts identified:** When Part 2 of the CIP Implementation Process is completed, Part 3 will be signed by the nominated CI Lead, appropriate Interface Manager, SM-WSA Environment Manger and WSA Environment Manager and that they have assessed cumulative impacts and that they will implement the outcomes and mitigation measures in accordance with each party's obligations.

Note: Completion of the form requires a representative from WSA and SM-WSA (i.e. where the CI Lead is from SM-WSA, the WSA Interface manager will be co-signatory, and vice-versa)

The form will then be distributed accordingly to all relevant parties.

7.2. Implementation of cumulative impact management and reporting

The agreed and signed CIP Implementation Form (see Section Part 3 – Cumulative Impacts Implementation Form sign-off 7.1.3) is to be included into the contractors' work method statements and other relevant environmental management documentation to ensure all control measures are integrated into the works.

Where possible, potential cumulative impacts will be managed and monitored through the implementation of existing mitigation measures, controls and processes as required under the respective project CEMPs and other EMS documentation. Examples of existing CEMP requirements include the following:

- Weekly environmental site inspections, to be undertaken in accordance with the existing EMS frameworks
- Environmental monitoring (air quality, noise, and water quality)
- Existing WSA dewatering/discharge permits (to be signed off by WSA prior to any discharge within the airport site)
- Out-of-Hours works approvals (any Out-of-Hours works must consider cumulative impacts and include consultation at the Out-of-Hours coordination meeting and require WSA endorsement)

- Traffic control and vehicle movement plans.
- Traffic control inspections; and
- Training and awareness through inductions and toolbox talks.

Each contractor is responsible for monitoring the performance and outcomes of the cumulative impacts' mitigation measures, controls, and processes. This could be documented through the following:

- Inspections
- Interface meetings
- Monitoring results / reporting (as necessary); and
- Monthly report of compliance.

8. Incidents, emergencies, and complaints management

8.1. Emergencies and Incidents

Emergencies and incidents are addressed by WSA and SM-WSA in the respective EMSs however where an occurrence is transboundary or has an impact external to the site in which both parties have contributed to, appropriate and collaborative response is required.

Examples of emergency events and incidents that could result in cumulative impacts include:

- Flood
- Bushfire
- Major spills
- Failure of any water containment (e.g., dams, and sediment basins); and
- Others as identified.

The WSA Incident and Emergency Management Plan will be applied which outlines the tools and processes to follow in the event of an incident/emergency event. In addition, the WSA or SM-WSA Project receiving the initial notification of an incident, emergency or other event will be responsible for immediately notifying their Rail Interface Manager and Environment Manager. The relevant Rail Interface Manager and Environment Manager in turn will be responsible for notifying their respective counterpart as soon as reasonably practicable to initiate the incident/event investigation process. The incident/event investigation should be recorded according to the WSA Environment Incident Recording, Reporting and Investigation Procedure (WSA00-WSA-00400-EN-PRO-000002). At completion of the incident/event investigation the Party undertaking the investigation shall inform the other Party within a reasonable time. If the findings of the investigation indicate the event/incident was caused by concurrent activities and resulted in generation of cumulative impacts.

As part the incident/event investigation, WSA and SM-WSA shall agree any mitigation/management measures that may be required to avoid recurrence of the incident/emergency event related to a cumulative impact.

WSA and SM-WSA and their contractors shall provide information and documents to close out any investigation reports and comply with their obligations under the AEPR (including under Section 6.04), Airport Plan and contractual agreement.

Any emergency event or incident related to a cumulative impact shall follow the emergency and complaints process map in Figure 5.

8.2. Complaints

WSA and SM-WSA complaints management plans outline the tools and processes to follow in the event of a complaint. WSA and SM-WSA and their contractors shall provide information and documents to close out any complaint investigation report and comply with their obligations under the Airport Plan and contractual agreement.

Any cumulative impact subject to a complaint from third parties shall follow the complaints process map in Figure 6.

Emergencies/Incidents related to Cumulative Impact Process Map

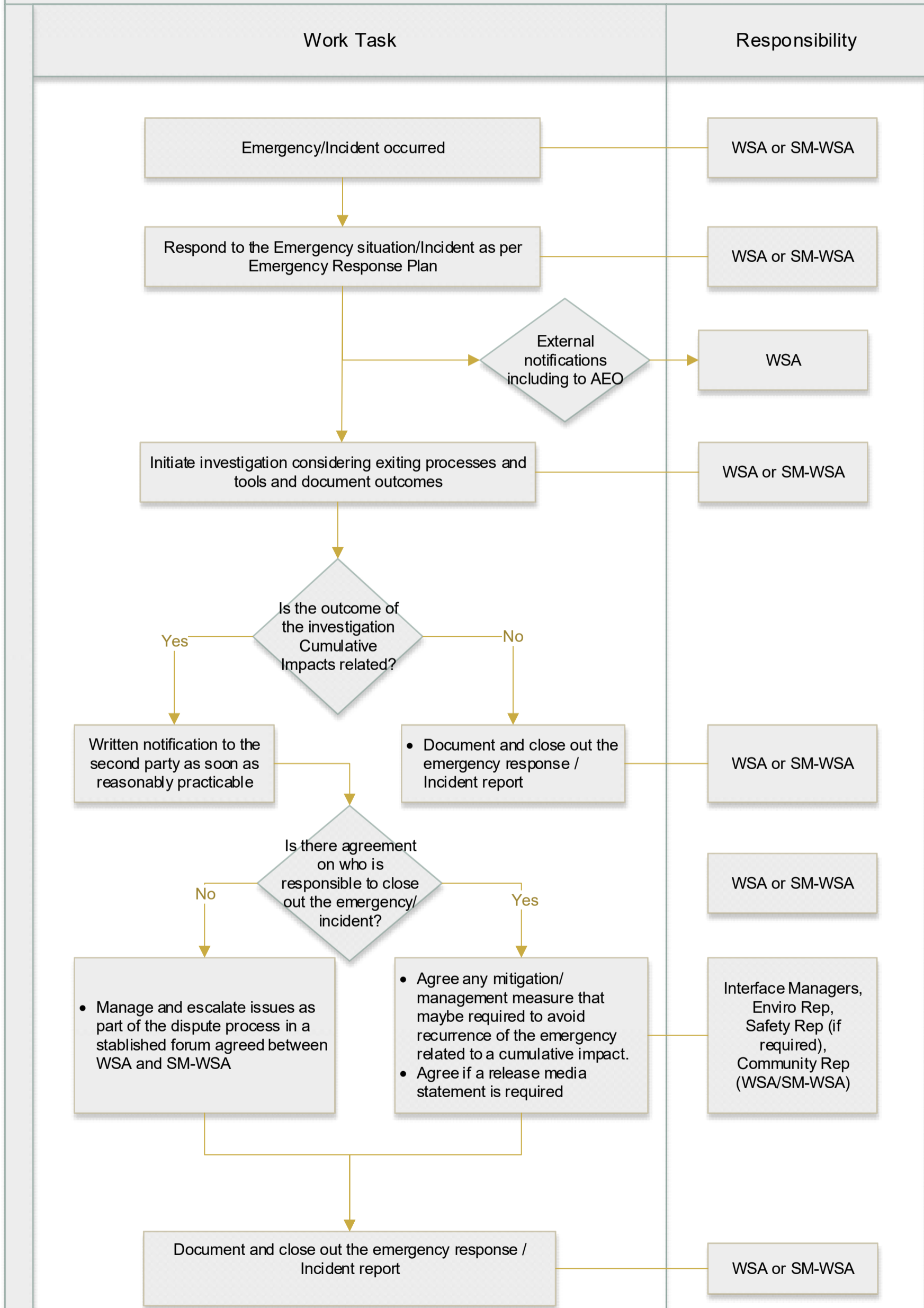


Figure 5 Emergencies/Incidents Process Map

Complaints related to Cumulative Impact Process Map

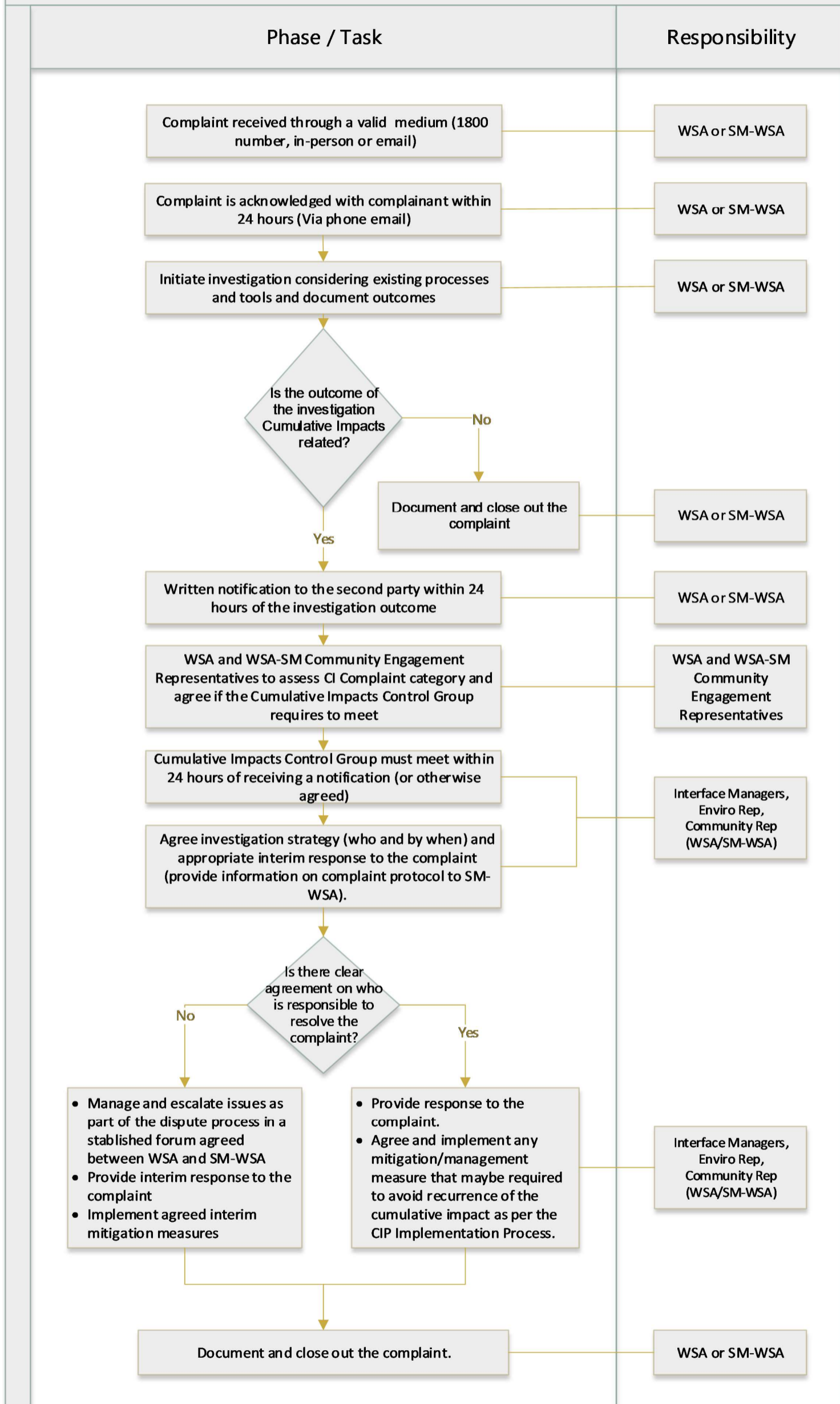


Figure 6 Cumulative Impacts Complaints Process Map

9. CIP Monitoring, Assurance and Reporting

Monitoring, assurance, and reporting will be undertaken to measure effectiveness and facilitate continuous improvement of cumulative impacts management and mitigation. General environmental monitoring, inspection and auditing requirements are included in the WSA and SM-WSA CEMPs and environmental management systems, and where appropriate have been expanded upon to include monitoring and assurance of cumulative impacts.

The monitoring, assurance and reporting requirements is provided below, with details of how they apply to cumulative impacts management.

9.1. Monitoring

An initial assessment of the existing monitoring program was completed between WSA and SM-WSA to determine if delineation of potential impacts for each project could be identified. The outcome of the assessment determined that the existing monitoring locations are sufficient to identify cumulative impacts and demonstrate compliance at receptors, except for surface water into Badgerys Creek. It was also determined the delineation of impacts would need to be responsive to program specific works and hence a process for identifying and agreeing these locations has been adopted. The monitoring program will be reviewed on an ongoing basis including at CIP Quarterly Review and Monthly Construction Interface Meetings. Each project is responsible for the monitoring and management of environmental impacts from construction of its own individual project. However, where additional monitoring is required, this will be undertaken by SM-WSA as informed by WSA and captured in the Cumulative Impacts Implementation Form.

In the event of complaints and exceedances related to cumulative impacts, attenuation and continuous monitoring will be completed based on the interfacing activities and scope of the works, unless subject matter expert/s advise an alternative effective approach. Supplementary monitoring will be reviewed and also documented in Part 2 of the Cumulative Impacts Implementation Form in the event further delineation between project is required (Refer to Section 9.1.1).

If the monitoring determines levels greater than predicted and identify as an exceedance, it will be considered a non-conformance, and communicated to relevant parties (including to the AEO in line with r6.04 of the AEPR where exceedance has resulted in pollution as defined under the AEPR), WSA and SM-WSA will review the construction process and existing mitigation measures and identify if additional mitigation measures will be implemented where reasonable and practicable. In the event mitigation or monitoring addition/changes are made the Cumulative Impacts Implementation Form will be updated and issued for re-approval.

Following investigation and reporting, a summary of the non-conformance must be recorded in nonconformance registers to be maintained by the WSA and SM-WSA. Improvement opportunities will also be recorded in the non-conformance register, for example to capture any system improvements recommended as the result of an investigation or general systems review.

A review of non-conformances, exceedances, incidents and complaints will be undertaken as described in Section 9.2

WSA and SM-WSA will regularly share copies of any monitoring conducted, including:

- Levels of pollution, if any, present in air, water or soil;
- Traffic changes; and
- Level of noise generated.

A summary of the monitoring requirements for this CIP is provided in Table 15, and the monitoring criteria and initial monitoring locations for this CIP is provided in Table 16.

Table 15 CIP monitoring requirements

Monitoring requirement*	Responsibility	Timing
The levels of pollution, if any, present in air, water, or soil arising from the Stage 1 Development and Rail Development activities at the WSI site.	WSA and SM-WSA	Monitoring data provided within 10 business days of the request (or as otherwise agreed)
The level of noise generated by the Stage 1 Development and Rail Development activities at the WSI site.	WSA and SM-WSA	Monitoring data provided within 10 business days of the request (or as otherwise agreed)
Traffic changes resulting from the Stage 1 Development and Rail Development.	WSA and SM-WSA	Monitoring data provided within 10 business days of the request (or as otherwise agreed).
<p>SM-WSA will agree with the WSA monitoring locations to delineate between the impacts of construction of the Stage 1 Development and Rail Development with respect to:</p> <ul style="list-style-type: none"> • Air quality • Noise • Vibration • Water quality (including surface water and groundwater) • Out-of-Hours activities • Heavy vehicle movements. <p>For the avoidance of doubt, SM-WSA is not responsible for monitoring the impacts of construction of the Stage 1 Development.</p>	SM-WSA	Prior to the commencement of Rail Development activities.
WSA and SM-WSA will provide monitoring results to each other as required to ensure the environmental reporting obligations have been met, including as required by regulation 6.04 and 6.05(1) of the <i>Airports (Environment Protection) Regulations 1997</i> .	WSA and SM-WSA	As required.
WSA will provide monitoring results of its activities to SM-WSA to ensure SM-WSA can meet its obligations for the purposes of investigating or addressing a cumulative impact; obtaining a Secondary Approval or another purpose as agreed in writing between WSA and SM-WSA.	WSA	As required.
Where WSA is required to amend the Construction Plan and/or construction environmental management plans to address appropriate mitigation measures with respect to cumulative impacts, SM-WSA must provide input and	SM-WSA	As required.

Monitoring requirement*	Responsibility	Timing
assistance, as required by WSA in amending such plans and determining such mitigation strategies, including the provision of information reasonably required to assist WSA including reports and monitoring results. Monitoring locations which will delineate impacts of construction during Rail Development regarding air quality, noise & vibration, water quality and heavy vehicle movements, will be implemented by SM and discussed with WSA and agreed.		
WSA and SM-WSA will provide reasonable input and assistance to each other in respect of any amendments required from time to time to plans under an Approval because of cumulative impacts, including monitoring results.	WSA and SM-WSA	As required.

Table 16 CIP monitoring criteria and WSA monitoring locations

Environmental aspects	Monitoring criteria*	WSA Monitoring locations
Air quality	WSA Air Quality CEMP	Figure 3 of the WSA Air Quality CEMP
Noise	WSA Noise and Vibration CEMP	Figure 10 of the WSA Noise and Vibration CEMP
Vibration	WSA Noise and Vibration CEMP	N/A
Night works	WSA Noise and Vibration CEMP	Figure 10 of the WSA Noise and Vibration CEMP
Water quality (including surface water and groundwater)	WSA Soil and Water CEMP and WSA SEMF	Figure 5 of the WSA Soil and Water CEMP
Traffic and access, including heavy vehicle movements	SM-WSA Traffic and Access CEMP	N/A

* Note: The criteria for the environment aspects above are consistent across both WSA and SM-WSA CEMPs, except for the Traffic and Access CEMPs where only the SM-WSA CEMPs have been adopted. All baseline monitoring criteria is consistent with Schedules 1-4 of the AEPR.

9.1.1. CIP monitoring regime framework

SM-WSA will undertake monitoring in addition to the Rail Development monitoring regime, to delineate its impacts during the Rail Development from those created as part of the Stage 1 Development. Due to the nature of construction activities the CIP monitoring strategy will need review on an ongoing basis to reflect the location and type of activities onsite. Monitoring locations will be either at source and/or receptors such that satisfactory delineation of impacts can be determined.

In addition, following review of the sitewide monitoring data reported as part of the WSA CEMPs, WSA may propose additional monitoring where cumulative impacts are likely or have arisen, to determine the source and extent of cumulative impacts.

Monitoring for cumulative impacts will need to be undertaken for management of the following impacts:

- a. Air quality
- b. Noise and vibration
- c. Surface and groundwater quality; and
- d. Traffic changes and access.

Air quality

The additional monitoring should be undertaken for parameters outlined in WSA and SM-WSA CEMPs such as dust, TSP, particulates:

- a. SM-WSA should consider locations inside WSIA at the interface between the Rail Development and Stage 1 Development work areas in the prevailing wind direction, using attended or fixed monitoring equipment.
- b. SM-WSA Contractors are required to undertake monitoring, to demonstrate compliance and to delineate their activities; and
- c. SM-WSA Contractors will undertake attended monitoring prior to the commencement of each cumulative impact activity to determine existing levels and delineation of dust etc. from concurrent activities.

Noise and vibration

The existing WSA and SM-WSA CEMPs identify continuous noise monitoring locations at sensitive receptors. SM will carry out further noise monitoring, either in the form of attend or static monitoring to determine the source and location of noise during out-of-hours works, during construction where cumulative impacts have been identified and following a compliant where concurrent activities are occurring.

Additional vibration and settlement monitoring along the rail tunnel alignment may be required when concurrent with surface earthworks and runway construction.

Surface water and groundwater

Additional monitoring to manage cumulative impacts of water management, should be carried out at each SM-WSA discharge point into the WSA drainage network and forms part of the Permit to Dewater approval process.

Suggested additional monitoring for potential surface water cumulative impacts. SM-WSA contractors are required to undertake water sampling:

- a. Prior to discharge from their site (both directly to watercourses and to WSA drainage system)
- b. Upstream and downstream of the permanent stockpiles; and
- c. If required, following a complaint, incident, rainfall event or exceedance.

WSA or SM-WSA will install, sample, and monitor their own groundwater bores. If additional groundwater monitoring is required due to concurrent activities SM-WSA will install, sample, and monitor additional groundwater bores.

Traffic and access management

Traffic changes and access monitoring should be carried out by SM (or their contractors) at intersections and road networks as per Section 6.2 of the SM-WSA CEMP. For cumulative impacts, additional monitoring parameters and locations will be determined on activity basis during the CIP implementation process.

Monitoring and Reporting

Monitoring activities and results for cumulative impacts, during construction or following an incident, will be reported at the:

- Quarterly review meeting outlined in the CIP Implementation Process, as an agenda item to anticipate monitoring requirements supporting management of cumulative impacts or additional monitoring may be required.
- Annual report (refer to Section 9.3 for details); and
- Monthly and investigation outcomes discussions on cumulative impacts confirming predicted performance and outcomes.

9.2. CIP coordination meetings

9.2.1. Cumulative Impacts Control Group

A Cumulative Impacts Control Group (CICG) will be formed to support the implementation of this CIP as follows:

- WSA and SM-WSA Interface Managers.
- WSA and SM-WSA Environmental Managers.
- WSA and SM-WSA Communications representatives; and
- Others, as required.

The CICG shall coordinate ongoing interface meetings to:

- Discuss monitoring results, or potential or actual cumulative impacts which are not the subject of formal complaint (as complaints will be dealt with as soon as the complaint is made).
- Review current monitoring program and determining if locations are appropriate.
- Identify any potential cumulative impacts which may arise from impending high impact activities.
- Review any investigation of cumulative impacts by the Airport Environment Officer.
- Ensure consistent approach to the management of cumulative impacts and any actual or potential reputational risks/issues arising from cumulative impacts.
- Consistent approach to the management of cumulative impacts and any actual or potential reputational risks/issues arising from cumulative impacts.
- Discuss mitigating to the extent possible, the occurrence of future cumulative impacts to ensure that WSA and SM-WSA continue to meet their statutory obligations under the Airports (Environment Protection) Regulations 1997 (Cth) and comply with the conditions of Approval.
- Analyse the cause of non-conformances and deficiencies for current activities, including those identified in environmental inspections, audits, incidents and monitoring reports.
- The CICG will be co-chaired by the Senior Representative from WSA and SM-WSA on a rotating basis.

- Develop a framework for the implementation of any investigation outcome reported by the AEO.

9.2.2. CIP Quarterly Review

A CIP Quarterly Review interface meeting will be chaired on an alternative basis by WSA and SM-WSA Environment Managers (or as delegated) and on a quarterly basis to enable regular communication between WSA and SM-WSA during construction of the Stage 1 Development and Rail Development and undertake a lookahead to identify potential cumulative impacts (CI Schedule). The CIP Quarterly Review interface meeting will require coordination between the following parties:

- WSA and SM-WSA Interface Managers.
- WSA and SM-WSA Environmental Managers.
- WSA and SM-WSA Package Managers; and
- WSA and SM-WSA Communications representatives.

The CIP Quarterly Review interface meetings will also be used as a tool to facilitate the continuous improvement of this CIP. A lessons-learned and continuous improvement agenda item will be included for the CIP Quarterly Review to:

- Identify areas of opportunity for improved environmental performance with regards to the management of cumulative impacts
- Analyse the cause of non-conformances and deficiencies, including those identified in environmental inspections and audits
- Verify the effectiveness of corrective and preventative actions
- Highlight any changes in procedures resulting from process improvement
- Review environmental monitoring locations, frequency, and reporting. Note any relevant findings relating to cumulative impacts from reviews and/or audits undertaken in accordance with the respective WSA or SM-WSA EMS.

Should the CIP Quarterly Review interface meetings identify the need to update this CIP in accordance with the lessons learnt and continuous improvement process, the WSA Environment Manager will facilitate any necessary changes to this CIP in consultation with the SM-WSA Environment Manager. The updated CIP will be reviewed and approved as per Section 1.6 and 1.7 of this CIP.

9.2.3. Monthly Construction Interface Meeting

Interface meeting will be held at monthly intervals and coordinated by the WSA and SM-WSA Interface Managers. Required participants at the monthly construction interface meetings will include the following as a minimum:

- WSA and SM-WSA Environmental Managers.
- WSA and SM-WSA Communications representatives (as required).
- WSA and SM-WSA Package Managers; and
- WSA and SM-WSA contractors.

Outcomes and actions from the monthly construction interface meetings will be documented in the meeting minutes and tracked by the WSA and SM-WSA Interface Managers.

To manage cumulative impacts, during the Construction Interface Meeting the following agenda items will be discussed:

- Outcomes from other interface coordination meetings held previously.
- Review of the Quarterly CI Schedule to determine if cumulative impacts are actual and if so, co-ordinate CI Implementation Form to be completed.
- Discuss and agree on additional monitoring of cumulative impacts, to delineate their origin during WSA and SM construction works.
- Where actual CIs are likely, determine if a focus group will be necessary, to address the specific CI, undertake risk assessment, mitigation and monitoring.
- Communicate any other outcomes of the Quarterly Review Meeting.
- Where necessary, review the performance of present CI management and its effectiveness.
- Communicate any changes in procedures resulting from CI process improvement
- Review Implementation of protocols, procedures, and monitoring to manage reputational risks arising from cumulative impacts.
- Provide feedback to the CI Control Group and Quarterly Review Group.

9.3. Reporting

The reporting requirements required under this CIP (including environmental reporting requirements under the Airport Plan specific to this CIP) is provided below in Table 17.

WSA and SM-WSA will share information to support the reporting requirements under the Airport Plan and existing CEMPs, and to confirm compliance with the existing CEMPs for the purpose of avoiding and mitigating cumulative impacts.

Table 17 CIP reporting requirements

Action	Scope	Timing	Responsibility
CIP Annual review	Despite sub condition (4), the ALC must review the Cumulative Impacts Plan every 12 months in consultation with the Rail Authority to ensure that the Plan continues to meet the approval criteria. The ALC must provide a report on the review (which may be included in an annual report required under condition 47).	Annually	WSA SM-WSA
	If the plan does not continue to meet the approval criteria, within three months of the provision of the report, the ALC in consultation with the Rail Authority must prepare and submit for approval under sub condition (1) a variation to ensure it continues to meet the approval criteria.	Three (3) months after provision of review report (if required)	WSA SM-WSA
Annual reporting	Unless otherwise agreed in writing by an Approver, an annual report will be prepared by SM-WSA addressing its compliance with this CIP (Condition 47). The annual report will be prepared for: a) The 12-month period commencing with the commencement of the rail construction works;	Annually	SM-WSA

Action	Scope	Timing	Responsibility
	<p>b) Each subsequent 12-month period until the end of the rail construction period; and</p> <p>c) Any period between the commencement of rail construction works and the end of the rail construction period that is not covered by a) or b) above.</p>		
	In accordance with Condition 47 (5) SM will publish each of the annual reports on its website within three months of the end of the period in respect of which the report was prepared, with evidence providing proof of the date of publication to the Infrastructure Department with a copy to DAWE. The report must remain on the website for a period of at least 12 months.	Annually	SM- WSA
Monthly compliance reporting	<p>Provide WSA with a monthly summary of the weekly inspection outcomes with regards to:</p> <ul style="list-style-type: none"> the management and compliance with the relevant to cumulative impacts management mitigation measures and controls. The management and reporting requirements of environmental non-conformances and improvement opportunities. 	Monthly	WSA Contractors SM-WSA Contractors
Community and Stakeholder reporting	Recording of complaints and stakeholder interactions in accordance with Community and this plan and WSA and SM-WSA Stakeholder Management Plan.	Always	WSA and SM-WSA Community Engagement Managers WSA and SM-WSA Environment Managers WSA and SM-WSA Contractors
Reporting under AEPR r 6.04	Under 6.04 of the AEPR, if monitoring discloses pollution, or excessive noise, occurring, the airport-lessee company must give an airport environment officer for the airport, within 14 days, a written report setting out details of the event including, <i>inter alia</i> , the nature, location, remedial actions	As needed	WSA

10. Competency, training, and awareness

10.1. WSA and SM-WSA training

To ensure this CIP is effectively implemented, each level of management is responsible for ensuring that all personnel actively involved in the planning and delivery of the associated works are aware of the requirements within this plan.

In addition to the training requirements specified by this plan and the project CEMPs, there will also be training required for any mitigation measures, controls and/or processes that may result following the outcomes of the CIP Implementation Process (see Section 7). Any additional cumulative impact training and awareness needs, where required, will be determined within the CIP Interface meetings by the WSA and SM-WSA Environment Manager or nominated delegate.

The WSA Environment Manager and SM-WSA Environment Manager or nominated delegate will coordinate the necessary and relevant environmental training in conjunction with other training and development activities. The training will be delivered at two levels as follows.

10.1.1. Project-wide CIP training and awareness

Project-wide CIP awareness training will be included as part of the project induction requirements, including but not limited to awareness of the following:

- CIP and relationship with the existing project documentation.
- Potential project interface impacts.
- Potential cumulative impacts; and
- CIP process and potential outcomes, including additional mitigation measures and controls.

The frequency of project-wide CIP training and awareness will be consistent with the training requirements outlined in the WSA SEMF and SM-WSA CEMF.

10.1.2. Specific CIP training and awareness

Specific CIP training for relevant personnel (as per roles and responsibilities in Section 4) will be undertaken at the time of project on-boarding and in-line with the training and induction requirements in the respective Environmental Management Systems. As a minimum, the CIP training would include the following:

- CIP overview, including purpose and scope.
- Awareness of stakeholder consultation requirements and existing processes, including the sharing of relevant information when required.
- Training on the CIP Implementation Process, tailored for relevant roles and responsibilities, including cumulative impacts management.
- Awareness of community engagement requirements for cumulative impacts; and
- Training for incident and complaints management.

In addition to the above, ongoing training may be required in response to the following:

- Additional mitigation measures, controls and/or processes resulting from the outcomes of the CIP Implementation Process.
- Updates to this CIP.
- Information on changes to legal and other requirements, such as the Airport Plan and contractual agreements.

- Review of environmental incidents and complaints attributed to cumulative impacts and corrective actions; and
- General refresher training as required to ensure relevant personnel are adequately trained and competent in the content and implementation processes and requirements outlined herein.

WSA and SM-WSA CIP training will be documented within the existing WSA and SM-WSA Induction and Training Register as required by the WSA SEMF and SM-WSA CEMF.

10.2. Contractor training

The WSA Environment Manager and SM-WSA Environment Manager will review training content to be delivered by WSA and SM-WSA Contractors. This content will be developed and rolled out regularly. To ensure that environmental controls are effectively implemented, the Contractor is responsible for ensuring that all personnel reporting to them are aware of the requirements of this CIP. Forms of environmental training may include:

- Project site induction, including environmental roles and responsibilities and incident reporting procedures.
- Toolbox talks.
- Pre-start meetings; and
- Environmental awareness training for specific issues.

The Contractor is to maintain a register of all project site inductions and environmental training carried out. Records of attendees at toolboxes are to be kept on file.

10.2.1. Contractor project inductions

All personnel (including sub-contractors) are to attend a site induction prior to commencing any work on site. The site induction includes an environmental component and ensures all personnel are aware of the environmental risks on site, the requirements of this CIP, and their responsibilities around the implementation of environmental management measures.

With regards to potential cumulative impacts, the environmental component will include, but not be limited to, an overview of:

- Project interface boundaries and potential risks.
- Potential cumulative impact risks.
- Key environmental issues and responsibilities.
- Additional mitigation measures, controls and/or processes required for cumulative impacts management; and
- Incident management, response, and reporting requirements.

Short-term visitors to site for purposes such as deliveries will be required to be always accompanied by inducted personnel. A visitors' induction will also be undertaken for visitor's onsite for short periods as agreed with the WSA and SM-WSA Safety Manager.

WSA and SM-WSA CIP Contractor training will be documented within the existing WSA and SM-WSA training registers as required by the WSA SEMF and SM-WSA CEMF.

10.2.2. Contractor toolbox talks, training, and awareness

Toolbox talks or similar are proposed to be held weekly, or in response to an incident and will be used to raise awareness and educate personnel on issues related to aspects of construction, including environmental issues. Toolbox talks will also include issues relevant to cumulative impacts management, as required.

Toolbox talks content relevant to cumulative impacts may include (but are not limited to):

- Project interface boundaries and potential risks.
- Potential cumulative impact risks specific to the works being undertaken.
- Identified cumulative impacts.
- Additional mitigation measures, controls and/or processes required for cumulative impacts management; and
- Incident management, response, and reporting requirements.

For activities with high cumulative impact risk (as identified through the CIP Implementation Process), targeted environmental awareness training is to be provided. The content of targeted training may include the topics outlined above, or as otherwise required, dependant on the nature of construction activities and the type of cumulative impacts risk.

The Environment Team and the Contractor is to maintain a register of environmental training, including toolbox talks. The register is to include a record of the topic, content, dates, names, and signatures of personnel trained.

10.2.3. Contractor daily pre-start meetings

As per the WSA SEMF and SM-WSA CEMF, pre-start meetings will occur at the commencement of each shift. The pre-start meeting is a tool for informing the workforce of the day's activities, including information relating to the work schedule, safety, environment (cumulative impacts) or other information that may be relevant to the day's work.

The pre-start meeting will include any aspect of the day's construction activities that require additional mitigation measures, control and/or processes to manage potential cumulative impacts.

The Contractor is to record pre-start topics, dates delivered and a register of attendees.

11. References

Western Sydney Airport Plan (Australian Government, September 2021)

Western Sydney Airport Environmental Impact Statement (Australian Government, 2016)

WSA Site Environmental Management Framework and CEMPs

WSA Construction Plan

WSA Community and Stakeholder Engagement Plan

WSA Enterprise Risk Management Framework

Sydney Metro – Western Sydney Airport EPBC Act Final Environmental Impact Assessment of on-airport proposed action (EPBC 2019/8541) (Australian Government, 2019)

Sydney Metro – Western Sydney Airport Construction Environmental Management Framework CEMPs

Sydney Metro – Western Sydney Airport Construction Plan

Sydney Metro – Western Sydney Airport Community Communication Strategy

Appendix A

Cumulative Impacts Risk Assessment Framework

Cumulative Impacts Risk Assessment Framework

A Cumulative Impacts Risk Assessment Framework was developed using the WSA Enterprise Risk Management Framework and WSA Environmental Aspects, Impact and Risk Procedure (Appendix G of the WSA SEMF). The Cumulative Impacts Risk Assessment Framework provides guidance with regards to the identification and assessment of potential cumulative impacts during the CIP Implementation Process as detailed further in Section 7 of this CIP.

The consequence and likelihood descriptors for the risk assessment framework are provided in Table 19 and Table 20, respectively.

The risk matrix with risk ratings is provided in Table 18.

Table 18 CIP risk consequence categories

CONSEQUENCE CATEGORIES				
	Environment	Reputation & Stakeholder	Legal & Compliance	Delivery
Extreme	Destruction or serious permanent damage to significant heritage or environment resources. A departure from the EIS.	Ongoing, sustained negative national media stories and social media commentary. High profile justified political criticism with the potential to drive shareholder government to intervene, such as establishment of inquiry. Sustained adverse community response, ongoing protests. Extensive loss of confidence / support from multiple major stakeholders. Reputation recovery unlikely with 2 years.	Breaches of legislation or regulatory requirements with severe consequences such as prosecutions, major litigation, and severe fines.	Schedule variance or scope change impact strategic performance resulting in delivery failure. Cost variation affects programme business case validity resulting in poor value for money. ANAO / Parliamentary Committee criticism.
Major	Major detrimental damage to heritage or environmental resources or long-term effects.	Multiple negative national media stories and social media commentary. High profile political criticism such as mentions in parliaments. Public outcry by way of strong criticism from the community, potentially supported by isolated protest activity. Significant dissatisfaction of multiple key stakeholders. Reputation recovers unlikely within 1 year.	Breaches of legislation or regulatory requirements with major consequences such as litigation, major fines, and ANAO inquiry. Undetected long-term fraud (discovered by accident rather than process). Sensitive information leaks.	Schedule variance resulting programme business case validity. Scope change drastically affects programme objectives. The programme cost outweighs the benefits substantially decreased.
Moderate	On-site environmental	Multiple negative local media stories or one-	Breaches of legislation or	Schedule variance

CONSEQUENCE CATEGORIES				
	Environment	Reputation & Stakeholder	Legal & Compliance	Delivery
	releases contained with outside assistance, medium term environment effects. Moderate damage to heritage resources.	off high-prominence negative national media story. Moderate negative social media commentary. Sustained criticism from a segment of the community. Local adverse political engagement. Moderate dissatisfaction of one or more key stakeholders. Reputational recovery likely within six to 12 months.	regulatory requirements with moderate consequences such as investigations, threat of litigation, moderate fines, additional reporting or ANAO attention. Systematic fraud of significant value.	impacting project business case validity. Scope change moderately affects project objectives. Benefits are substantially decreased.
Minor	Minor environmental impacts, any environmental on-site releases or heritage resource damages are contained.	One off negative local media story. Limited social media commentary. Criticism from minor community segment. Minor dissatisfaction of one or more key stakeholders. Reputational recovery likely within one to three months.	Breaches of legislation or regulatory requirements with minor consequences such as minor legal issues and/or fine imposed.	Minor milestone slippage. Scope change requires manageable changes. The value of the benefits equals the cost of the project / programme.
Insignificant	Insignificant effects on heritage or environmental assets.	Insignificant community, stakeholder, social media, or media attention.	Breaches of legislation or regulatory requirements with insignificant consequences and/or breaches of regulations.	Product slippage does not affect key milestones. Scope change does not affect the effectiveness of the product. Benefit degradation is tolerable.

Table 19 CIP risk likelihood categories

LIKELIHOOD CATEGORIES				
Level	Probability	Frequency probability	Qualitative description	Frequency description
Almost Certain	>90%	Frequent	You would be surprised if this did not happen	Could occur several times a year
Likely	70 – 89%	Probable	More likely to happen than not	Could occur once in 3 years
Possible	60 – 69%	Occasional	Just as likely to happen than not	Could occur once in 10 years

LIKELIHOOD CATEGORIES				
Level	Probability	Frequency probability	Qualitative description	Frequency description
Unlikely	11 – 39%	Very unlikely	Less likely to happen than not	Could occur once in 30 years
Rare	<10%	Remote	You would be surprised if this happened	Could occur once in 100 years

Table 20 CIP risk matrix

RISK MATRIX					
	Likelihood				
Consequence	Rare	Unlikely	Possible	Likely	Almost Certain
Extreme	Medium	High	High	Severe	Severe
Major	Low	Medium	Medium	High	Severe
Moderate	Low	Low	Medium	Medium	High
Minor	Very low	Low	Low	Low	Medium
Insignificant	Very low	Very low	Low	Low	Low

Appendix B

CIP Implementation Form Template

Refer to WSA70-WSA-08000-EN-FRM-100002-CIP Implementation Form