Instructions on how to prepare *Environmental Protection Act 1986* Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports

Purpose of these instructions

The following instructions, and related attached templates, have been written to guide proponents who are required to offset significant residual impacts to the environment resulting from implementing proposals within the Pilbara. Since 2012, the Western Australian (WA) Minister for Environment has required proponents to pay offset contributions into a 'fund for conservation' now known as the 'Pilbara Environmental Offsets Fund' (the Fund). The Department of Water and Environmental Regulation (DWER) invests contributions to the Fund in strategic biodiversity conservation projects across the Pilbara.

Proponents are required to make a monetary contribution to the Fund when environmental values, such as good to excellent vegetation or significant fauna habitat, are impacted by a proposal and will have a significant residual impact. Impact Reconciliation Procedures (IRP) and Impact Reconciliation Reports (IRR) are required to evidence the areas impacted and enable the amount of money owing to the Fund to be calculated.

These instructions have been developed by DWER to assist proponents in preparing an IRP and/or IRR, as required through an assessment process or as part of an implementation condition included in a Ministerial Statement issued under Part IV of the *Environmental Protection Act 1986* (EP Act) for proposals within the Pilbara. These materials may be adapted in the future to apply to similar offset initiatives or conditions.

Impact Reconciliation Procedure

The primary purpose of the IRP is for a proponent to outline the method they will use to calculate the area of vegetation (or other environmental value) impacted within an Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the Pilbara.

Initially, an IRP was required prior to ground-disturbing activities in accordance with Ministerial Statement conditions. It is now a requirement for proponents to submit an IRP as a component of their environmental impact assessment for all new proposals. The IRP is approved during the assessment process such that, if the project is approved, the Ministerial Statement will include a condition requiring the proponent to implement the IRP.

An IRP usually requires approval only once for a proposal unless the proponent requests, or the Chief Executive Officer (CEO) of DWER requires, this document to be updated.

Detailed instructions on how to prepare an IRP are provided in Appendix A.

Impact Reconciliation Report

IRRs are usually required to be submitted biennially once an IRP is approved and ground-disturbing activities have commenced. The purpose of the IRR is to advise DWER's CEO of the extent of impacts to an environmental value in each financial year of a biennial reporting period.

Detailed instructions on how to prepare an IRR are provided in Appendix B.

Rates and consumer price indexation

The rates per hectare that proponents must pay into the Fund are set by the Environmental Protection Authority (EPA). They vary based on the level of biodiversity protection in the region, and cumulative impacts to environmental values (such as high-quality vegetation and significant species habitat). A base rate, higher rate or negotiated rate may apply depending on the circumstances, IBRA v7 subregion(s), and/or environmental value(s) being impacted. DWER publishes the indexed rates on the Pilbara Environmental Offsets Fund website.

Unless otherwise specified in the Ministerial Statement for a proposal, the real value of contributions is subject to consumer price indexation through the application of the percentage changes in the 'All groups' Consumer Price Index for Perth (CPI), as published by the Australian Bureau of Statistics.

The rate for each year of a biennial reporting period is calculated by DWER using the CPI rate for that financial year, consistent with the implementation condition.

For example, a proponent of a proposal in the Hamersley IBRA subregion submits its first IRR to DWER for impacts between July 2016 and June 2018. The base rate for the Hamersley subregion was set at $750 per hectare to apply to the first year of ground-disturbing activities. CPI then applies to each subsequent year of reporting impacts. For this IRR, the proponent will be invoiced for $750 per hectare of impacts in 2016/2017, and $756.75 per hectare for impacts in 2017/2018, applying the CPI rate of 0.9%.

Payments

Following the submission and acceptance of an IRR, DWER will calculate impact areas to two decimal places (0.01 ha) for each financial year and will invoice the proponent for the total amount owing for that biennial reporting period, indexed against CPI (as exemplified above). The proponent will be issued a receipt once the money has been received into the special purpose account for the Fund.

Communication of IRPs and IRRs

Once deemed acceptable by the WA Minister for Environment or the CEO of DWER, and where agreed with the proponent, an IRP or IRR submission will be communicated on a DWER-affiliated website or platform.

Intellectual property (IP) owners have control over whether an IRP, IRR and accompanying electronic data files (within a data packages) is communicated. This control is exercised with the use of licences that are granted by IP owners as part of the Metadata and Licensing Statement, which must be submitted as an attachment to an IRP or IRR. The licences can allow the submission components to be (a) withheld; (b) communicated; or (c) communicated, with the option for licensees to use the electronic data files under a Creative Commons (CC) licence.

The explanatory notes accompanying the Metadata and Licensing Statement explain these options in full. It is essential that proponents identify and understand who the IP owner is before the Metadata and Licensing Statement is completed.

Please note that imagery and remote sensing data supplied with an IRP or IRR data package do not form a component of the electronic data which would be communicated.

Proponents who intend to license their IRP, IRR or electronic data files under a CC licence and/or for communication via a DWER-affiliated website or platform must ensure that they own the IP rights to that material or that they otherwise have the right and authority to grant a licence. That is, they themselves must obtain all necessary licences and consents from any relevant IP owner.

A clear understanding of IP rights is essential when proponents engage third parties to conduct surveys on their behalf. Proponents and environmental practitioners should discuss their expectations around data sharing at the beginning of a proposal. Proponents should ensure that their requirements for IP ownership and sharing are clearly defined during the procurement process or by formal agreement.

Spatial data datum GDA2020

The electronic data files that form an IRP or IRR data package will be accepted in both Geocentric Datum of Australia 1994 (GDA94) and Geocentric Datum of Australia (GDA2020) format for a transition period up until 30 June 2021. From 1 July 2021, the electronic data files will be required to be submitted in the GDA2020 format.

Appendix A: How to prepare an Impact Reconciliation Procedure

Content of an Impact Reconciliation Procedure

The Department of Water and Environmental Regulation (DWER) encourages proponents proposing to develop an Impact Reconciliation Procedure (IRP) that covers more than one proposal or Ministerial Statement to consult with the department to ensure that regulatory requirements are met.

IRPs prepared for multiple proposals or Ministerial Statements must clearly delineate the offsets required for each proposal and include relevant proposal-specific information.

Where a revised proposal results in superseded Ministerial Statement/s, or several previous Ministerial Statements are amalgamated, proponents are required to detail all relevant changes that relate to the reporting of impacts to offset applicable areas.

IRP submission

An IRP submission will contain:

- one **Metadata and Licensing Statement**.
- one **IRP document** in .pdf format
- a data package comprising the following electronic data files (as detailed in the IRP data package instructions below):
    - one **boundaries** spatial dataset identifying the proposed or approved development envelope, in shapefile (.shp, etc.) or ESRI geodatabase format
    - one **baseline** spatial dataset identifying the state of land and values within the authorised extent of the proposal, in shapefile (.shp, etc.) or ESRI geodatabase format
    - one or more **imagery** or remote sensing data files used to support the delineation of the environmental values (where applicable to the IRP method).

Template instructions

These instructions are intended to be used in conjunction with the template for *Environmental Protection Act 1986* Part IV Impact Reconciliation Procedure, available for download online.

Document control

Include a table at the front of the IRP with version, date, and authorisation (name and signature).

1. The proposal and condition requirements

1.1 The proposal

Identify the proposal(s) and/or Ministerial Statement number(s) for which the IRP has been developed.

1.2 Ministerial Statement condition requirements (if applicable)

Identify and outline the implementation condition requirements for the IRP, as detailed in the relevant Ministerial Statement(s).

2. Procedure

The purpose of the IRP procedure is to outline the proponent's method to define the extent of impacts to environmental values within a biennial reporting period. This method must be consistent with implementation conditions. This information can be presented in tabular format and/or succinct text.

2.1 Identification of the environmental values requiring offsets

The IRP must define the environmental values required to be offset that have been identified through assessment or by a Ministerial Statement condition. This must include but may not be limited to:

- Biodiversity survey information which establishes the pre-impacted extent and condition of all relevant environmental values (unless DWER confirms that it has already been provided), and other supportive biodiversity survey information.
- Historical clearing and other exemptions that are not applicable to offsets. This may include existing exemptions for clearing as approved in Ministerial Statement conditions, Native Vegetation Clearing Permits (NVCP), existing roads or infrastructure, and areas impacted by livestock grazing.

2.2 Method to determine impacts

2.2.1 Impacts

The IRP is required to outline how the proponent intends to document and calculate the extent of impacts to environmental values requiring offsets. The method therefore needs to document how comparisons will be made between the 'baseline' state of vegetation and/or habitat which existed prior to the proposal's impacts, and the state of vegetation and/or habitat at the end of each financial year within the reporting period. This method should use appropriate survey techniques which may include aerial photography and/or ground-truthing, and should be clear and repeatable. The surveys must be undertaken annually as the CPI rate which will apply will be based on the financial year in which the impacts occurred (unless DWER has agreed to an alternative arrangement in writing).

3. Reporting

3.1 Frequency and timing

The first biennial reporting period must start prior to the date that a proposal commences ground-disturbing activities. All subsequent biennial reporting periods should be 24 months and the IRP should define the dates of these periods. The first biennial reporting period may be less than 24 months to align with the financial year, or another practical reporting period approved by the Chief Executive Officer (CEO) of DWER, to ensure that it is consistent with the proposal's implementation conditions.

DWER expects that an Impact Reconciliation Report (IRR) will be submitted no later than four months after the conclusion of the biennial reporting period specified in the IRP.

3.2 Impacts and reconciliation

Define the expected impacts and information which will be used in the IRR to corroborate impact reconciliation data, including but not limited to the relevant environmental values, associated impacts to the environmental values, the corresponding spatial data, rate and/or IBRA v7 subregion, and a forward estimate of likely impacts in future biennial reporting periods.

List the following applicable information that will be submitted in the Impact Reconciliation Reports:

- impacts that have occurred during each financial year of the reporting period, attributed by environmental value and relevant IBRA v7 subregion
- information used to validate impact areas, including aerial imagery or remote sensing data; digitised polygons and ground-truthing surveys used to determine impacts for each financial year
- information regarding any exemptions, other clearing approvals or reductions to contributions to the fund, where relevant (such information may include details and spatial data for impacts approved against a previous Ministerial Statement, or clearing permit)
- details and spatial data for historical impacts which are excluded from offset contributions
- an estimate of impacts expected to be reported in subsequent reporting periods.

4. Figures

Include figures, maps and diagrams showing the 'baseline' state of environmental value(s) (e.g. good to excellent condition vegetation, ghost bat habitat areas) and areas exempt from offset (e.g. clearing under other approvals, poor to completely degraded condition vegetation) relevant to your proposal.

Maps and figures should be clear and legible, of appropriate scale, in either jpeg or pdf format and of good resolution (> 300 dpi). Maps should represent all spatial data that is required to be submitted as part of an IRP data package.

5. Appendices

Provide details for each of the electronic data files being supplied with the IRP data package:

- **boundaries** spatial dataset
- **baseline** spatial dataset
- **imagery** or remote sensing data files (where applicable to the IRP method).

Any additional relevant information, such as schedules for IRPs that cover more than one proposal or Ministerial Statement, or other relevant information.

Impact Reconciliation Procedure data package instructions

These instructions are intended to be used in conjunction with the shapefile templates for *Environmental Protection Act 1986* Part IV Impact Reconciliation Procedure data packages, available for download online.

Spatial data requirements

Proponents are required to submit spatial data as part of an IRP detailing the 'baseline' state of the land within the authorised extent of the proposal. This extent will most commonly be the proposal development envelope and, where relevant, any other specific area(s) identified to be offset.

This spatial data will serve as a 'baseline' state of the land against which proponents will report impacts in each IRR.

This is particularly relevant to any impacts to environmental values which may precede offset conditions or requirements. All spatial data provided for assessment of the IRP should be current at the time of submission, or accord with the date the Environmental Impact Assessment (EIA) 'baseline' surveys were conducted.

Areas which have 'offset exempt' impacts (approved in the conditions of the current Ministerial Statement) must also be provided. For 'offset exempt' areas which are yet to be finalised, as the authorised extent of clearing has not yet been exhausted, proponents must delineate the known 'offset exempt' areas to date in the current 'baseline' extent dataset, and then provide updated 'offset exempt' areas with respective IRRs.

This spatial data will form the electronic data files for an IRP data package, which will support DWER in assessing environmental impact and compliance with implementation conditions. It must be prepared using the data standards below, to ensure that methods are transparent and consistent between proponents.

An IRP may be accompanied by one or more IRP data package(s). Where an IRP is associated with more than one proposal, an IRP data package must be submitted individually for each proposal.

Topologically correct spatial data is required in a GIS format that is georeferenced and conforms to the parameters detailed in the below data standards.

Each file within an IRP data package should comply with the data standards detailed in these instructions.

Data standards

The following instructions and accompanying electronic 'boundaries' and 'baseline' dataset templates, make up the IRP data standards. The electronic templates and examples for IRP data packages are available for download online.

These data standards define the minimum requirements to attribute each electronic data file. Electronic data files containing attributes or details in addition to the data standards will still be accepted, but are not required.

IRP data packages should be provided in a single .zip file which includes all required electronic data files detailed in these instructions. Where an IRP may detail more than one proposal, a data package is to be provided individually for each proposal. IRP data packages that are incomplete, or that do not otherwise comply with these instructions and the data standards, will be returned to the proponent for correction.

Please include a reference number on the spatial data package .zip file that specifies the proposal and/or Ministerial Statement number and date to ensure it is easily identifiable.

Boundaries spatial dataset

The purpose of the 'boundaries' spatial dataset is to identify the proposed or approved development envelope, or 'other' specified Ministerial Statement boundary/boundaries, within which impacts are proposed/authorised to take place. Note that any 'other' boundaries are required to include the development envelope(s) for any overlapping, superseded, or amalgamated proposal boundaries. Where one proposal's development envelope overlaps with another, the proponent must clarify which proposal will contribute funds for impacts to environmental values within the overlapping area(s), and which will only report the impacts.

At a minimum, this dataset should include the most recent proposed or approved development envelope, as well as any other specified boundaries delineated in a relevant Ministerial Statement condition.

Table 1: Properties of the boundaries spatial dataset

File format	shapefile (.shp, etc.) or Esri geodatabase
Datum	Geocentric Datum of Australia 2020 (GDA2020) datum, projected using the appropriate Map Grid of Australia zone (e.g. MGA Zone 50)*
File naming	Boundaries_1_YYYYMMDD **

*Where a dataset's extent is greater than a single zone, the GDA2020 datum alone is acceptable. The coordinate system used should be defined natively with the submitted spatial data files, for example via a .prj file for submission of an Esri shapefile.
** Submission date for the dataset.

Within the boundaries spatial dataset, each boundary must be supplied as a single closed polygon. The boundary details should then be captured as attributes of the polygon (as per Table 2). All attributes specified in Table 2 (below) are required.

Table 2: Attributes required for an approval boundaries spatial dataset

Feature Class: Polygon
Usage: The boundaries for all areas where impacts are proposed or have been approved are to be defined using polygons.
File naming: Boundaries_1

Field	Type	Length	Description	Example
Proponent	Text	150	Name of the proponent.	Pilbara Mining Pty Ltd
Project	Text	254	Name of the project.	Pilbara Gold Mine
AssessNum	Text	50	Ministerial Statement number or assessment number.	1234
BoundType	Text	50	Type of boundary (e.g. proposed development envelope, Ministerial Statement boundary).	Ministerial Statement Boundary
AreaHa	Double	999999.99	Area of the boundary in hectares (ha)	2224.53
Comments	Text	254	Additional information about the boundary, if any.	

Baseline spatial dataset

The purpose of this dataset is to capture the 'baseline' state of all land areas within the development envelope of a proposal, and any other offset-applicable areas which may fall outside this boundary. This dataset should incorporate the baseline survey data at the time of EIA and prior to ground-disturbing activities.

These areas should comprise all, or a combination, of the following (some of which may overlap):

Environmental values:

- Vegetation condition attributed in accordance with the Eremaean and Northern Botanical Provinces - Vegetation Condition Scale (Table 2) in the Environmental Protection Authority's (EPA) *Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment*. For example: degraded, good, very good, and excellent.
- Areas of other environmental value(s) (e.g. Ghost Bat habitat, priority ecological community, riparian vegetation). These boundaries are defined and verified during EIA.

'Offset exempt' areas:

- Previous ground disturbance (impact areas) that do not require an offset, attributed with reasons (e.g. areas authorised to be impacted under a previous Ministerial Statement allocation not yet exhausted, native vegetation clearing permit (NVCP), other exempt approval, or historical clearing.
- Other area(s) exempt from offsets as identified at the time of submission with assessment documentation or specified in the relevant Ministerial Statement conditions.

Table 3: Properties of the baseline spatial dataset

File format	shapefile (.shp, etc.) or Esri geodatabase
Datum	Geocentric Datum of Australia 2020 (GDA2020) datum, projected using the appropriate Map Grid of Australia zone (e.g. MGA Zone 50)*
File naming	Baseline_2_YYYYMMDD**

*Where a dataset's extent is greater than a single zone, the GDA2020 datum alone is acceptable. The coordinate system used should be defined natively with the submitted spatial data files, for example via a .prj file for submission of an Esri shapefile.
** Submission date for the dataset.

Within the 'baseline' spatial dataset, the extent of each vegetation condition category (degraded, good, excellent, etc.) should be represented as a separate closed polygon, with no overlaps or slivers between features. Where a vegetation condition category crosses subregion boundaries, a separate polygon for the category should be provided for each subregion it crosses. The combined polygons must cover the full extent of the development envelope (at minimum) and any other offset-applicable area for the proposal. All attributes specified in Table 4 (below) are required.

For impacts that precede the implementation conditions of a Ministerial Statement, all areas are to be included in the baseline spatial data file and attributed by the relevant clearing approval, instrument type, or exemption details. Historically cleared land not related to the proposal also needs to be recorded in the baseline dataset, with a note specifying as such in the 'comments' attribute (e.g. that it relates to existing roads, infrastructure or livestock grazing).

Where proponents have 'offset exempt' approvals for impact limits that have not yet been reached, any areas impacted under these mechanisms following the approval of the IRP are to be submitted with the relevant IRR data package. For example, where a proposal impacts four ha of vegetation under an NVCP in November 2020, following approval of the proposals IRP in September 2020, this four ha will be reported as 'offset exempt' clearing in the first IRR. These areas will not incur offset payment charges.

Table 4: Attributes required for a baseline spatial dataset

Feature class: Polygon
Usage: Polygons that delineate the 'baseline' condition of the environmental values within the development envelope for a proposal are to be provided
File naming: Baseline_2

Field	Type	Length	Description	Example
Proponent	Text	150	Name of the proponent.	Pilbara Mining Pty Ltd
Project	Text	254	Name of the project.	Pilbara Gold Mine
AssessNum	Text	50	Ministerial Statement number or assessment number.	1234
IBRA	Text	50	IBRA v7 subregion: Chichester, Fortescue, Hammersley or Roebourne.	Fortescue
EnvValue	Text	254	Description of the environmental value (leave blank if not applicable to this feature, e.g. existing cleared area).	Good to excellent vegetation within the mine development envelope
VegCond	Text	50	Vegetation condition within the proposed boundary or approval boundary for a Ministerial Statement: • excellent • very Good • good • Poor • degraded • completely degraded • cleared (impacts that precede a proposal's ground-disturbing activities). Leave this field blank where a feature relates to another environmental value (e.g. riparian vegetation) and has not been cleared.	Poor
CondDate	Text	10	Date (DD/MM/YYYY) that the condition of vegetation was classified. This will usually be the date of survey. For 'Cleared' land, this will be the date of impacts, where possible to identify (note the financial year end date, or date that this feature was captured, if specific date not available or recorded i.e. 30/06/2015).	10/12/2016
ClearAppvl	Text	150	Approval details for any areas of 'cleared' land which is 'offset exempt' as per a Ministerial Statement condition (e.g. preceding Ministerial Statement number or specified NVCP permit number). NVCP or other work approval clearing can be provided as a consolidated feature (per approval type, e.g. one polygon for all NVCPs) for those not specified in a Ministerial Statement condition.	-

Field	Type	Length	Description	Example
			Specify 'unknown' for historical clearing (e.g. roads, prior clearing by another proponent). Leave this field blank where not applicable to this feature.	
Offset	Text	5	Will the feature be subject to offset where impacted? • Yes • No (cleared areas exempt from offset, poor to completely degraded vegetation categories etc.).	No
SurveyHa	Double	999999.99	Area of the feature in hectares (ha).	24.51
SurvMethod	Text	150	Method of capturing feature data.	Desktop analysis of aerial imagery capture
Comments	Text	254	Any additional comments relating to the land condition.	

Imagery and remote sensing data

Information used to support the delineation of the environmental values, such as aerial imagery or remote sensing data should be supplied for the assessment of the IRP (where it is both available and included in the method to determine impacts). Any imagery or remote sensing data should capture the 'baseline' state of the land within the development envelope and any other offset applicable area of a proposal, prior to ground disturbance.

Imagery is to be georeferenced and the coordinate system is to be GDA2020 (datum) and within one of the following formats: Enhanced Compressed Wavelet (ECW), Joint Photographic Experts Group (JPEG), JPEG 2000, or Geo Tagged Image File Format (GeoTIFF). The minimum resolution for imagery should be to one metre. Remote sensing data is also to be georeferenced to GDA2020 and be in a format compatible with the Esri suite of software.

In naming the electronic data file, imagery files should reference the capture date.

Submitting Impact Reconciliation Procedures

DWER prefers IRP submissions to be emailed but will also accept documents and CDs submitted by post. Where files exceed 25 MB, please contact EPA Services to arrange uploading to the EPA Cloud.

An IRP data package should be submitted with an IRP as an attachment. There is no requirement for proponents to directly upload data through the IBSA portal or any other DWER-affiliated online portal.

Email: registrar@dwer.wa.gov.au or EPA Services
Department of Water and Environment Regulation
Locked Bag 10, JOONDALUP DC WA 6919

Enquiries:

Telephone: 08 6364 7000 Email: info.epa@dwer.wa.gov.au

Instructions, templates and forms are available at www.epa.wa.gov.au

Appendix B: How to prepare an Impact Reconciliation Report

Impact Reconciliation Report submission

An Impact Reconciliation Report (IRR) submission will contain:

- one **Metadata and Licensing Statement**
- one **IRR document** in .pdf format
- a data package comprising the following electronic data files (as detailed in the IRR data package instructions below):
    - one **impacts** spatial dataset in shapefile (.shp, etc.) or ESRI geodatabase format
    - two or more **imagery** or remote sensing data files which capture the impacts for each year of the reporting period (in accordance with the approved Impact Reconciliation Procedure (IRP)).

Template instructions

An IRR must be developed individually for each Ministerial Statement and be submitted by the proponent identified on the Ministerial Statement (i.e. not a parent company). This is to ensure clear accounting with implementation conditions.

These instructions are intended to be used in conjunction with the template for *Environmental Protection Act 1986* Part IV Impact Reconciliation Report, available for download online.

1. The proposal and condition requirements

1.1 The Proposal

Identify the proposal for which the IRR has been developed, and the approved IRP with which the IRR accords. Please include appropriate document references for the IRP and the date it was approved by the Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER).

1.2 Condition requirements

Identify the implementation condition requirements for the IRR.

2. Reporting

2.1 Impacts undertaken during the reporting period

Proponents are to detail the extent of impacts to each environmental value for which an offset is required, within each financial year of a biennial reporting period. The extent of impacts must be supported by spatial data and other supporting information used to calculate the areas, such as aerial imagery, remote sensing data or ground-truthing surveys.

2.2 Impacts proposed for the following reporting periods

For Ministerial Statements that require contributions to the Pilbara Environmental Offsets Fund (the Fund), proponents are requested to provide a forward estimate of impacts in subsequent reporting periods. This will facilitate successful implementation of the Fund and allow DWER to plan project selection based on potential future cash flows. Forward estimates will be used as a guide only and will not constrain proponents from implementing their proposal as required. Proponents will not be invoiced for forward estimates, only on impacts reported in accordance with item 2.1 above.

3. Figures

The IRR requires the provision of maps, figures and spatial data. These need to be clear and legible, of appropriate scale, in either jpeg or pdf format, and in high resolution (> 300 dpi). Maps should represent all

spatial data that is required to be submitted as part of an IRR data package with respect to the IRP baseline spatial data.

IRR data packages are required to support assessment and compliance of proponents' reportable impacts to environmental values identified in Ministerial Statement conditions. The following data standards also ensure consistency of method between proponents, and transparency. Proponents are required to submit an IRR data package for each biennial reporting period of a proposal, following the approval of the associated IRP.

4. Appendices

Any additional relevant information.

Impact Reconciliation Report data package instructions

These instructions are intended to be used in conjunction with the shapefile template for *Environmental Protection Act 1986* Part IV Impact Reconciliation Report data packages, available for download online.

Spatial data requirements

Following the approval of an IRP, an IRR is to be submitted biennially for a proposal in accordance with the reporting structure approved in the relevant IRP. The purpose of an IRR is to advise the CEO on the impacts which have occurred in each financial year (or as otherwise stated in the implementation condition) of a biennial reporting period.

This impact data will provide a spatial record of the areas (hectares) impacted for a proposal and be used to assess and calculate a proponent's financial contribution to the Fund.

Each IRR will be accompanied by one data package, and each package must be associated with a single proposal approved under a Ministerial Statement.

Topologically correct spatial data is required in a GIS format which is georeferenced and conforms to the parameters detailed in the data standards below.

Each file within an IRR data package should comply with the data standards detailed in these instructions.

Data standards

The following instructions and accompanying electronic IRR templates make up the IRR data standards. The electronic templates and examples for IRR data packages are available for download online.

These data standards define the minimum required set of attributes and details for each electronic data file submitted. Electronic files containing additional attributes or details are not necessary to meet the requirements of an IRR data package submission but will be accepted.

A data package is to be submitted with an IRR report. IRR data packages should be provided in a single .zip file that includes all required files detailed in these instructions. IRR data packages that are incomplete, or that do not otherwise comply with these instructions and the data standards, will be returned to the proponent for correction.

Please include a reference number on the data package .zip file that specifies the Ministerial Statement number and date to ensure it is easily identifiable.

Impacts spatial dataset

The purpose of this dataset is to report all impacts which have taken place within a biennial reporting period.

This dataset will delineate impact areas within the development envelope and any other specific area/s identified to be offset, attributed by the financial year of impact within the biennial reporting period.

Within the 'impacts' spatial dataset, impacted areas should be provided as closed polygons, with no overlaps or slivers between features. The details of each impact area should then be captured as attributes of the polygon features (Table 6). All attributes specified in Table 6 below are required.

Table 5: Properties of the impacts spatial dataset

File format	shapefile (.shp, etc.) or Esri geodatabase
Datum	Geocentric Datum of Australia 2020 (GDA2020) datum, projected using the appropriate Map Grid of Australia zone (e.g. MGA Zone 50)*
File naming	Impacts_1_YYYYMMDD**

*Where a dataset's extent is greater than a single zone, the GDA2020 datum is acceptable. The coordinate system used should be defined natively with the submitted spatial data files, for example via a .prj file for submission of an Esri shapefile.
** Submission date for the dataset.

Table 6: Attributes required for an impacts spatial dataset

Feature Class: Polygon
Usage: The areas of impacts for each year of a biennial reporting period are to be supplied in polygon format.
File naming: ImpactAreas_1

Field	Type	Length	Description	Example
Proponent	Text	150	Name of the proponent.	Pilbara Mining Pty Ltd
Project	Text	254	Name of the project.	Pilbara Gold Mine
MSNum	Text	10	Ministerial Statement number.	1234
IBRA	Text	50	IBRA v7 subregion: Chichester, Fortescue, Hammersley or Roebourne.	Hamersley
Year	Short Integer	4	Specify to which financial year in the reporting period the impact area relates.	2019
ImpactDate	Text	10	Date (DD/MM/YYYY) that impacts to vegetation occured. The financial year end date is acceptable.	30/06/2016
AppvlID	Short Integer	50	Approval number under which impacts to vegetation are authorised (current/superseded Ministerial Statement, Native Vegetation Clearing Permit, etc.). Leave this field blank where not applicable (i.e. clearing permits under Part V that are not specified in a Ministerial Statement condition).	5678
AppvlType	Text	50	Type of approval, i.e. Ministerial Statement, Native Vegetation Clearing Permit. Specify 'unknown' where this information is unavailable and include a description in the 'comments' attribute detailing to what the impacts relate.	Native vegetation clearing permit

Field	Type	Length	Description	Example
EnvValue	Text	254	Environmental value impacted (specify 'offset exempt' for other areas e.g. Poor vegetation condition, exempt clearing).	Good to excellent vegetation in the development envelope
VegCond	Text	50	Condition of land within the approval boundary for the Ministerial Statement (if applicable, otherwise leave blank): • excellent • very good • good • poor • degraded • completely degraded.	Very Good
Offset	Text	5	Is this feature of impact subject to be offset?	No
ImpactHa	Double	999999.99	Area of impacted land reported in hectares.	53.85
RepPeriod	Text	50	Reporting period relating to impacts (Month/YYYY)	July 2016 to June 2017
SurvMethod	Text	150	The method employed to calculate areas (field: ImpactHa). Must be clear and repeatable. For example; aerial photogrammetry, desktop analysis, field surveys, ground-truthing, or combination of above.	Desktop analysis and aerial photographs
Comments	Text	254	Additional information about the approval boundary, if any.	

Imagery and remote sensing data

Imagery and remote sensing data should be supplied for each year of the reporting period (where included in the IRP method to determine impacted areas), which captures the land condition for the areas of impact within the development envelope and any other offset-applicable area of a proposal. Aerial imagery and/or remote sensing data will be used to assess the reported areas of impact.

Imagery is to be georeferenced and the coordinate system is to be GDA2020 (datum) and within one of the following formats: Enhanced Compressed Wavelet (ECW), Joint Photographic Experts Group (JPEG), JPEG 2000, or Geo Tagged Image File Format (GeoTIFF). Imagery is required to be a minimum one metre resolution. Remote sensing data is also to be georeferenced to GDA2020 and be in a format compatible with the Esri suite of software.

In naming the electronic data file, imagery files should reference their capture date.

Submitting Impact Reconciliation Reports

DWER prefers that IRR submissions are emailed but will also accept documents and CDs submitted by post.

Where files exceed 25 MB, please contact Compliance and Enforcement to arrange uploading to the Cloud.

An IRR data package must be submitted with an IRR as an attachment. There is no requirement for proponents to directly upload data through the IBSA portal or any other DWER-affiliated online portal.

Email: registrar@dwer.wa.gov.au or

Senior Manager,
Compliance and Enforcement
Department of Water and Environment Regulation
Locked Bag 10, JOONDALUP DC WA 6919

Enquiries:

Telephone: 08 6364 7000 Email: compliance@dwer.wa.gov.au

Instructions, templates and forms are available on www.epa.wa.gov.au

Definitions

Acronym or abbreviation	Definition or term
Assessment documentation	This can include supporting information provided with a referral, additional assessment information (including an Environmental Review Document), and information to support changing implementation conditions and/or changes to proposals after the Ministerial Statement was issued.
CEO	The Chief Executive Officer of the department of the public service of the state responsible for the administration of the *Environmental Protection Act 1986*. Currently the Director General of the Department of Water and Environmental Regulation.
CPI	Consumer Price Index
DE	Development envelope, proposal boundary, maximum disturbance boundary, or other authorised extent specified in assessment documentation, or a Ministerial Statement, to be the extent of applicable impacts subject to offset condition(s).
Delegate	Person or public authority who, by instrument of delegation made under sections 18, 19 or 20 of the *Environmental Protection Act 1986*, is authorised to perform all or any of the powers or duties under the EP Act of the decision-maker (being either the Minister, the EPA or the CEO).
DWER	The Department of Water and Environmental Regulation.
EIA	Environmental Impact Assessment.
Environmental values	As identified in assessment documentation or the conditions within a Ministerial Statement, the environmental values within the Pilbara bioregion (e.g. good to excellent vegetation, Ghost Bat habitat, riparian vegetation) which require offsets.
EPA	Environmental Protection Authority, defined as the Authority in Part I, section 3 of the EP Act, or their delegate.
The Fund	The Pilbara Environmental Offsets Fund.
IBRA	Interim Biogeographic Regionalisation for Australia.
Impacts	Relate to the direct or indirect significant residual impacts to environmental values for the purposes of an Impact Reconciliation Procedure or an Impact Reconciliation Report. Defined as 'clearing' as per section 51A of the *Environmental Protection Act 1986*.
IRP	Impact Reconciliation Procedure
IRR	Impact Reconciliation Report
Metadata and Licensing Statement	A form that must be completed and submitted with an IRP or IRR submission, which identifies a proponent's decision regarding the communication of an IRP, IRR and/or the accompanying electronic data files.
Ministerial Statement	Statement issued under section 45 (or under section 45 as applied by section 46(8)) of the EP Act (which may include implementation conditions).
NVCP	Native Vegetation Clearing Permit.