



Referral of proposed action

What is a referral?

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) provides for the protection of the environment, especially matters of national environmental significance (NES). Under the EPBC Act, a person must not take an action that has, will have, or is likely to have a significant impact on any of the matters of NES without approval from the Australian Government Environment Minister or the Minister's delegate. (Further references to 'the Minister' in this form include references to the Minister's delegate.) To obtain approval from the Environment Minister, a proposed action should be referred. The purpose of a referral is to obtain a decision on whether your proposed action will need formal assessment and approval under the EPBC Act.

Your referral will be the principal basis for the Minister's decision as to whether approval is necessary and, if so, the type of assessment that will be undertaken. These decisions are made within 20 business days, provided sufficient information is provided in the referral.

Who can make a referral?

Referrals may be made by or on behalf of a person proposing to take an action, the Commonwealth or a Commonwealth agency, a state or territory government, or agency, provided that the relevant government or agency has administrative responsibilities relating to the action.

When do I need to make a referral?

A referral must be made for actions that are likely to have a significant impact on the following matters protected by Part 3 of the EPBC Act:

- World Heritage properties (sections 12 and 15A)
- National Heritage places (sections 15B and 15C)
- Wetlands of international importance (sections 16 and 17B)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A)
- Protection of the environment from nuclear actions (sections 21 and 22A)
- Commonwealth marine environment (sections 23 and 24A)
- Great Barrier Reef Marine Park (sections 24B and 24C)
- A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
- The environment, if the action involves Commonwealth land (sections 26 and 27A), including:
 - actions that are likely to have a significant impact on the environment of Commonwealth land (even if taken outside Commonwealth land);
 - actions taken on Commonwealth land that may have a significant impact on the environment generally;
- The environment, if the action is taken by the Commonwealth (section 28)
- Commonwealth Heritage places outside the Australian jurisdiction (sections 27B and 27C)

You may still make a referral if you believe your action is not going to have a significant impact, or if you are unsure. This will provide a greater level of certainty that Commonwealth assessment requirements have been met.

To help you decide whether or not your proposed action requires approval (and therefore, if you should make a referral), the following guidance is available from the Department's website:

- the Policy Statement titled Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. Additional sectoral guidelines are also available.

- the Policy Statement titled Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies.
- the Policy Statement titled Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources.
- the interactive map tool (enter a location to obtain a report on what matters of NES may occur in that location).

Can I refer part of a larger action?

In certain circumstances, **the Minister may not accept a referral for an action that is a component of a larger action and may request the person proposing to take the action to refer the larger action for consideration under the EPBC Act (Section 74A, EPBC Act)**. If you wish to make a referral for a staged or component referral, read 'Fact Sheet 6 Staged Developments/Split Referrals' and contact the Referrals Gateway (1800 803 772).

Do I need a permit?

Some activities may also require a permit under other sections of the EPBC Act or another law of the Commonwealth. Information is available on the Department's web site.

Is your action in the Great Barrier Reef Marine Park?

If your action is in the Great Barrier Reef Marine Park it may require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If a permission is required, referral of the action under the EPBC Act is deemed to be an application under the GBRMP Act (see section 37AB, GBRMP Act). This referral will be forwarded to the Great Barrier Reef Marine Park Authority (the Authority) for the Authority to commence its permit processes as required under the Great Barrier Reef Marine Park Regulations 1983. If a permission is not required under the GBRMP Act, no approval under the EPBC Act is required (see section 43, EPBC Act). The Authority can provide advice on relevant permission requirements applying to activities in the Marine Park.

The Authority is responsible for assessing applications for permissions under the GBRMP Act, GBRMP Regulations and Zoning Plan. Where assessment and approval is also required under the EPBC Act, a single integrated assessment for the purposes of both Acts will apply in most cases. Further information on environmental approval requirements applying to actions in the Great Barrier Reef Marine Park is available from <http://www.gbrmpa.gov.au/> or by contacting GBRMPA's Environmental Assessment and Management Section on (07) 4750 0700.

The Authority may require a permit application assessment fee to be paid in relation to the assessment of applications for permissions required under the GBRMP Act, even if the permission is made as a referral under the EPBC Act. Further information on this is available from the Authority:

Great Barrier Reef Marine Park Authority

2-68 Flinders Street PO Box 1379

Townsville QLD 4810

AUSTRALIA

Phone: + 61 7 4750 0700

Fax: + 61 7 4772 6093

www.gbrmpa.gov.au

What information do I need to provide?

Completing all parts of this form will ensure that you submit the required information and will also assist the Department to process your referral efficiently. If a section of the referral document is not applicable to your proposal enter N/A.

You can complete your referral by entering your information into this Word file.

Instructions

Instructions are provided in blue text throughout the form.

Attachments/supporting information

The referral form should contain sufficient information to provide an adequate basis for a decision on the likely impacts of the proposed action. You should also provide supporting documentation, such as environmental reports or surveys, as attachments.

Coloured maps, figures or photographs to help explain the project and its location should also be submitted with your referral. Aerial photographs, in particular, can provide a useful perspective and context. Figures should be good quality as they may be scanned and viewed electronically as black and white documents. Maps should be of a scale that clearly shows the location of the proposed action and any environmental aspects of interest.

Please ensure any attachments are below three megabytes (3mb) as they will be published on the Department's website for public comment. To minimise file size, enclose maps and figures as separate files if necessary. If unsure, contact the Referrals Gateway (email address below) for advice. Attachments larger than three megabytes (3mb) may delay processing of your referral.

Note: the Minister may decide not to publish information that the Minister is satisfied is commercial-in-confidence.

How do I pay for my referral?

From 1 October 2014 the Australian Government commenced cost recovery arrangements for environmental assessments and some strategic assessments under the EPBC Act. If an action is referred on or after 1 October 2014, then cost recovery will apply to both the referral and any assessment activities undertaken. Further information regarding cost recovery can be found on the Department's website at:

<http://www.environment.gov.au/epbc/publications/cost-recovery-cris>

Payment of the referral fee can be made using one of the following methods:

- **EFT Payments can be made to:**

BSB: 092-009

Bank Account No. 115859

Amount: \$7352

Account Name: Department of the Environment.

Bank: Reserve Bank of Australia

Bank Address: 20-22 London Circuit Canberra ACT 2601

Description: The reference number provided (see note below)

- **Cheque** - Payable to "Department of the Environment". Include the reference number provided (see note below), and if posted, address:

The Referrals Gateway
Environment Assessment Branch
Department of the Environment
GPO Box 787
Canberra ACT 2601

- **Credit Card**

Please contact the Collector of Public Money (CPM) directly (call (02) 6274 2930 or 6274 20260 and provide the reference number (see note below).

Note: in order to receive a reference number, submit your referral and the Referrals Gateway will email you the reference number.

How do I submit a referral?

Referrals may be submitted by mail or email.

Mail to:

Referrals Gateway
Environment Assessment Branch
Department of Environment
GPO Box 787
CANBERRA ACT 2601

- If submitting via mail, electronic copies of documentation (on CD/DVD or by email) are required.

Email to: epbc.referrals@environment.gov.au

- Clearly mark the email as a 'Referral under the EPBC Act'.
- Attach the referral as a Microsoft Word file and, if possible, a PDF file.
- **Follow up with a mailed hardcopy including copies of any attachments or supporting reports.**

What happens next?

Following receipt of a valid referral (containing all required information) you will be advised of the next steps in the process, and the referral and attachments will be published on the Department's web site for public comment.

The Department will write to you within 20 business days to advise you of the outcome of your referral and whether or not formal assessment and approval under the EPBC Act is required. There are a number of possible decisions regarding your referral:

The proposed action is NOT LIKELY to have a significant impact and does NOT NEED approval

No further consideration is required under the environmental assessment provisions of the EPBC Act and the action can proceed (subject to any other Commonwealth, state or local government requirements).

The proposed action is NOT LIKELY to have a significant impact IF undertaken in a particular manner

The action can proceed if undertaken in a particular manner (subject to any other Commonwealth, state or local government requirements). The particular manner in which you must carry out the action will be identified as part of the final decision. You must report your compliance with the particular manner to the Department.

The proposed action is LIKELY to have a significant impact and does NEED approval

If the action is likely to have a significant impact a decision will be made that it is a *controlled action*. The particular matters upon which the action may have a significant impact (such as World Heritage values or threatened species) are known as the *controlling provisions*.

The controlled action is subject to a public assessment process before a final decision can be made about whether to approve it. The assessment approach will usually be decided at the same time as the controlled action decision. (Further information about the levels of assessment and basis for deciding the approach are available on the Department's web site.)

The proposed action would have UNACCEPTABLE impacts and CANNOT proceed

The Minister may decide, on the basis of the information in the referral, that a referred action would have clearly unacceptable impacts on a protected matter and cannot proceed.

Compliance audits

If a decision is made to approve a project, the Department may audit it at any time to ensure that it is completed in accordance with the approval decision or the information provided in the referral. If the project changes, such that the likelihood of significant impacts could vary, you should write to the Department to advise of the changes. If your project is in the Great Barrier Reef Marine Park and a decision is made to approve it, the Authority may also audit it. (See "*Is your action in the Great Barrier Reef Marine Park*," p.2, for more details).

For more information

- call the Department of the Environment Community Information Unit on 1800 803 772 or
- visit the web site <http://www.environment.gov.au/epbc>

All the information you need to make a referral, including documents referenced in this form, can be accessed from the above web site.

Referral of proposed action

Project title: Rockbank Sewer Rising Main – Greigs Rd West Vegetation Removal

1 Summary of proposed action

NOTE: You must also attach a map/plan(s) and associated geographic information system (GIS) vector (shapefile) dataset showing the location and approximate boundaries of the area in which the project is to occur. Maps in A4 size are preferred. You must also attach a map(s)/plan(s) showing the location and boundaries of the project area in respect to any features identified in 3.1 & 3.2, as well as the extent of any freehold, leasehold or other tenure identified in 3.3(i).

1.1 Short description

Use 2 or 3 sentences to uniquely identify the proposed action and its location.

In order to service future development within the Rockbank area, Western Water has identified required upgrades to sewer infrastructure. The overall alignment is approximately 8 km long, however the majority of this is within the Melbourne Strategic Assessment (MSA) area (Western Growth Corridor – Melton to Wyndham) and therefore outside the area requiring approval as it will be undertaken in accordance with the Program Report. The Rockbank Rising Main project will result in disturbance to 1.231 ha of a degraded form of the nationally listed community Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP). **The section of the alignment requiring approval is approximately 2.2 km long, along the southern side of the Greigs Road West road reserve between Ferris Road and Mount Cottrell Road and along the west side of Mount Cottrell Road.**

1.2 Latitude and longitude

Latitude and longitude details are used to accurately map the boundary of the proposed action. If these coordinates are inaccurate or insufficient it may delay the processing of your referral.

Intersection location	Longitude			Latitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
Greigs Road West and Ferris Road	144	35	31.792	-37	45	5.32555
Greigs Road West and Mt Cottrell Road	144	36	38.983	-37	45	11.9322
Mt Cottrell and Greigs Road	144	36	42.946	-37	44	51.2778

The Interactive Mapping Tool may provide assistance in determining the coordinates for your project area.

If the area is less than 5 hectares, provide the location as a single pair of latitude and longitude references. If the area is greater than 5 hectares, provide bounding location points.

There should be no more than 50 sets of bounding location coordinate points per proposal area.

Bounding location coordinate points should be provided sequentially in either a clockwise or anticlockwise direction.

If the proposed action is linear (eg. a road or pipeline), provide coordinates for each turning point.

Also attach the associated GIS-compliant file that delineates the proposed referral area. If the area is less than 5 hectares, please provide the location as a point layer. If greater than 5 hectares, please provide a polygon layer. If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer (refer to GIS data supply guidelines at [Attachment A](#)).

Do not use AMG coordinates.

1.3 Locality and property description

Provide a brief physical description of the property on which the proposed action will take place and the project location (eg. proximity to major towns, or for off-shore projects, shortest distance to mainland).

The action will be undertaken within the southern road reserve of Greigs Road West, and the western road reserve of Mount Cottrell Road, Rockbank. The road reserves are managed and undergo periodic grading along the edge closest to the road. This site is immediately adjacent to the western edge of the Western Growth Corridor – Melton to Wyndham. Surrounding properties are currently farmland (refer figure below).

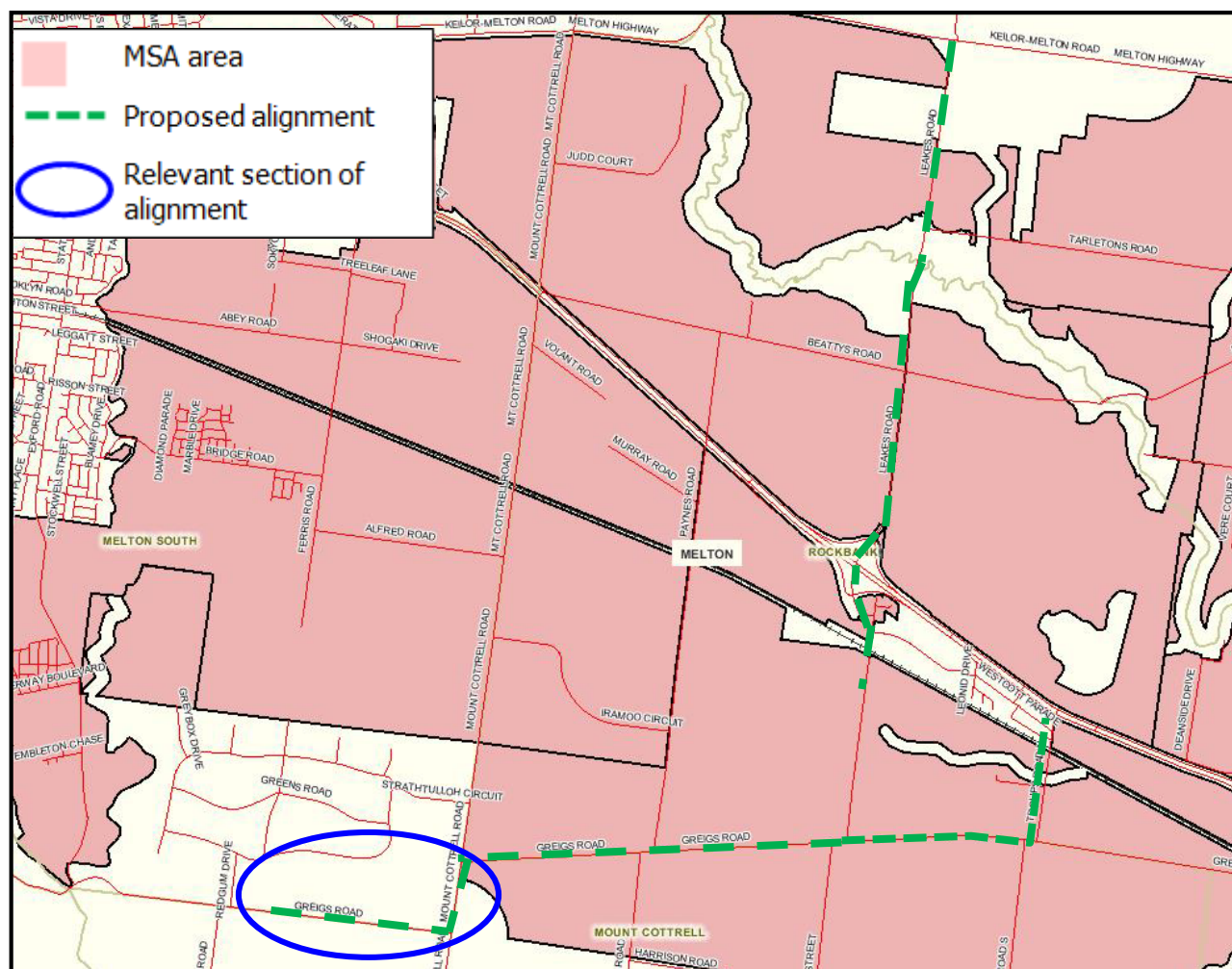


Figure 1-1: Subject site location (DPCD 2014)

1.4	Size of the development footprint or work area (hectares)	3.75 Ha
1.5	Street address of the site	Within southern road reserve of Greigs Road West and the western road reserve of Mount Cottrell Road, Rockbank, Victoria.
1.6	Lot description	Describe the lot numbers and title description, if known. No Lot number as action (subject to this referral) will be undertaken within road reserves. A small section of pipeline associated with the wider project will connect into a manhole located on Western Water-owned land (Lot 77-207 Butlers Road Mount Cottrell).
1.7	Local Government Area and Council contact (if known)	If the project is subject to local government planning approval, provide the name of the relevant council contact officer. Melton City Council Contact: Dr Lawrie Conole, Environmental Planner 232 High Street, Melton, Vic, 3337 PO Box 21 Melton, Vic, 3337 Tel: 03 9747 7227 Mob: 0400 726 887 lawriec@melton.vic.gov.au

Time frame

Specify the time frame in which the action will be taken including the estimated start date of construction/operation.

The works will be undertaken in 2016 subject to timely approvals.

1.9	Alternatives to proposed action Were any feasible alternatives to taking the proposed action (including not taking the action) considered but are not proposed?		No
		✓	Yes, you must also complete section 2.2
1.10	Alternative time frames etc Does the proposed action include alternative time frames, locations or activities?	✓	No
			Yes, you must also complete Section 2.3. For each alternative, location, time frame, or activity identified, you must also complete details in Sections 1.2-1.9, 2.4-2.7 and 3.3 (where relevant).
1.11	State assessment Is the action subject to a state or territory environmental impact assessment?	✓	No
			Yes, you must also complete Section 2.5
1.12	Component of larger action Is the proposed action a component of a larger action?		No
		✓	Yes, you must also complete Section 2.7
1.13	Related actions/proposals Is the proposed action related to other actions or proposals in the region (if known)?		No
		✓	Yes, provide details: Leakes Road DN450 Pipeline Project – The project involves the installation of a DN450mm potable water main along Leakes Rd between Melton Highway and just south of the Melbourne-Ballart railway line.
1.14	Australian Government funding Has the person proposing to take the action received any Australian Government grant funding to undertake this project?	✓	No
			Yes, provide details:
1.15	Great Barrier Reef Marine Park Is the proposed action inside the Great Barrier Reef Marine Park?	✓	No
			Yes, you must also complete Section 3.1 (h), 3.2 (e)

2 Detailed description of proposed action

NOTE: It is important that the description is complete and includes all components and activities associated with the action. If certain related components are not intended to be included within the scope of the referral, this should be clearly explained in section 2.7.

2.1 Description of proposed action

This should be a detailed description outlining all activities and aspects of the proposed action and should reference figures and/or attachments, as appropriate.

In order to service future development within the Rockbank area, Western Water has identified required upgrades to sewer infrastructure.

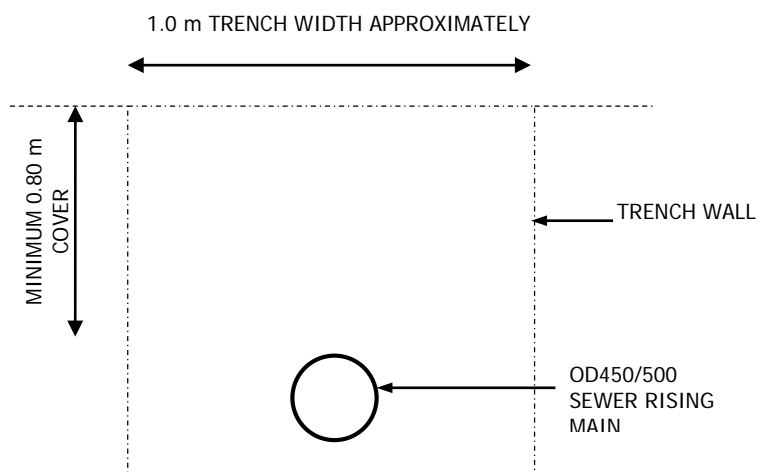
The project involves the installation of a sewer rising main and associated infrastructure. In order for the sewer pressure main to operate effectively, an above ground structure called a barometric loop is also required to be installed at a high point in the vertical alignment. The barometric loop consists of a vertical looped section of pipe rising approximately 3m above the ground surface, and is proposed to be located within the southern road reserve along Greigs Road West, approximately 130m west of the intersection of Greigs Road West and Mount Cottrell Road. A landscape plan has been designed for the Barometric Loop to screen this above ground structure.

The overall alignment is approximately 8 km long, however the majority of this is within the Melbourne Strategic Assessment (MSA) area (Western Growth Corridor – Melton to Wyndham) and therefore outside the area requiring approval (refer to Section 2.7 below and Figure 1-1 in Section 1.3). **The section of the alignment located outside of the MSA area and containing two areas representative of a threatened ecological community (the subject of this referral) is approximately 2.2 km long, along the southern side of the Greigs Rd West road reserve between Ferris Rd and Mount Cottrell Rd, and along the west side of Mount Cottrell Rd.**

The nominal pipeline diameters are as follows:

1. A OD500 (Outside Diameter) sewer rising main along the southern road reserve of Greigs Rd West between Ferris Rd and east to the proposed barometric loop location; and
2. A OD450 (Outside Diameter) sewer rising main along the southern road reserve of Greigs Rd West from the proposed barometric loop location east to Mount Cottrell Rd, north along the western road reserve of Mount Cottrell Road between Greigs Rd West and Greigs Road, east along the northern road reserve of Greigs Rd from Mount Cottrell Rd to Troups Rd North, and north along the eastern road reserve of Troups Rd North from Greigs Rd to an area just north of the Melbourne-Ballarat railway line where it will connect into the proposed Rockbank Sewerage Pump Station (SPS) to be located at 11 Troups Rd North.

The works along Greigs Rd West and Mount Cottrell Rd will be open cut with a trench width of approximately 1.0 m wide and a construction corridor (to allow for vehicles, spoil etc). The total construction corridor along Greigs Road West is generally 15 m south from the edge of bitumen due to pipe offset requirements as instructed by Melton City Council. The sewer main will generally have a minimum cover of 0.80 metres.



2.2 Alternatives to taking the proposed action

This should be a detailed description outlining any feasible alternatives to taking the proposed action (including not taking the action) that were considered but are not proposed (note, this is distinct from any proposed alternatives relating to location, time frames, or activities – see section 2.3).

The Rockbank area is largely within a Growth Area covered by the Melbourne Strategic Assessment and as such will be undergoing future development. The proposed action is required to service this future development and there is no alternative to not providing sewer infrastructure to future populations of this area. As such, not taking the action is not a feasible alternative for this project.

Utilising the road reserves was the most direct and viable option for the project and the alternative option of utilising private land would have raised numerous constraints, likely with a similar environmental impact. With intensive urban development proposed in the area in coming years, further infrastructure is likely within the road reserves including road widening, bike paths and additional water/waste water infrastructure. As such, the road reserve provides a logical and practical option of containing the infrastructure within a specific linear corridor.

The main alternative researched for this project was the use of trenchless technology to reduce impacting on native vegetation and fauna habitat. Investigations found that this technique was not viable due to adverse subsurface ground conditions (mixture of clay and high strength basaltic rock) at the required pipeline depth.

Vegetation within the first five metres of the road edge is highly modified and dominated by exotic grass species, with gravel extending 1-2 metres from the edge of bitumen. Therefore an alternative to the current alignment was to install the pipes as close to the road edge as possible, within the more disturbed vegetation. However, Council have dictated the location of the pipe within the pipe reserve. Advice from Voltaire David (Infrastructure Planning Coordinator, Melton City Council) was as follows: "The centre of pipes must be located a minimum 10m away from the existing edge of the road pavement and a minimum 5m away from the property boundary on the south side" (refer to email attached). Due to this constraint, moving the alignment into the most disturbed part of the road reserve is not possible. These constraints are due to future road widening which is planned for the area.

2.3 Alternative locations, time frames or activities that form part of the referred action

If you have identified that the proposed action includes alternative time frames, locations or activities (in section 1.10) you must complete this section. Describe any alternatives related to the physical location of the action, time frames within which the action is to be taken and alternative methods or activities for undertaking the action. For each alternative location, time frame or activity identified, you must also complete (where relevant) the details in sections 1.2-1.9, 2.4-2.7, 3.3 and 4. Please note, if the action that you propose to take is determined to be a controlled action, any alternative locations, time frames or activities that are identified here may be subject to environmental assessment and a decision on whether to approve the alternative.

There are no alternative locations, timeframes or activities proposed.

2.4 Context, planning framework and state/local government requirements

Explain the context in which the action is proposed, including any relevant planning framework at the state and/or local government level (e.g. within scope of a management plan, planning initiative or policy framework). Describe any Commonwealth or state legislation or policies under which approvals are required or will be considered against.

The following policy and legislation has been considered during preparation of this referral and biological reporting associated with this project:

- The provisions of the EPBC Act have been considered and are reflected in this referral.
- All works will be carried out in accordance with the Melton Planning Scheme. This will include submitting a planning permit application for the removal of native vegetation. There has been close consultation with Council representatives since preliminary design of this project.
- The *Permitted clearing of native vegetation – Biodiversity assessment guidelines* (the Guidelines) outline how impacts on Victoria's biodiversity are assessed when an application to remove native vegetation is lodged. The Guidelines are incorporated into the Victoria Planning Provisions and all planning schemes in Victoria. The Guidelines replace *Victoria's Native Vegetation – A Framework for Action*. The objective for the permitted clearing of native vegetation is that there is no net loss (DEPI 2013). The Native Vegetation Information Management (NVIM) website will be used to determine the risk-based pathway, offsetting requirements, and information required to be provided when applying for the planning permit.
- The provisions of the Flora and Fauna Guarantee Act 1988 have been considered. Vegetation classified as Natural Temperate Grassland of the Victorian Volcanic Plain is also likely to be representative of the FFG-listed community Western (Basalt) Plains Grassland Community. A permit may be required to remove this protected community, however this will be confirmed via correspondence with DELWP via the planning permit process.
- The provisions of the Catchment and Land Protection Act 1994 have been considered (relating to the management of noxious weeds and soil erosion).
- The majority of the alignment (not considered as part of this referral) falls within the Melbourne Strategic Assessment (MSA) area. Therefore, the Biodiversity Conservation Strategy (BCS) and relevant documents will be followed for the section of the project within the MSA area. There has been close consultation with DELWP representatives since preliminary design of this project.

2.5 Environmental impact assessments under Commonwealth, state or territory legislation

If you have identified that the proposed action will be or has been subject to a state or territory environmental impact statement (in section 1.11) you must complete this section. Describe any environmental assessment of the relevant impacts of the project that has been, is being, or will be carried out under state or territory legislation. Specify the type and nature of the assessment, the relevant legislation and the current status of any assessments or approvals. Where possible, provide contact details for the state/territory assessment contact officer.

Describe or summarise any public consultation undertaken, or to be undertaken, during the assessment. Attach copies of relevant assessment documentation and outcomes of public consultations (if available).

No formal environmental impact statement has been required for this project.

2.6 Public consultation (including with Indigenous stakeholders)

Your referral must include a description of any public consultation that has been, or is being, undertaken. Where Indigenous stakeholders are likely to be affected by your proposed action, your referral should describe any consultations undertaken with Indigenous stakeholders. Identify the relevant stakeholders and the status of consultations at the time of the referral. Where appropriate include copies of documents recording the outcomes of any consultations.

Extensive consultation with major stakeholders (Melton City Council, DELWP, DoE, VicRoads, Melbourne Water), have taken place throughout the duration of this (the entire) project including several meetings, discussions and correspondence (refer table below for a summary). The preliminary phase of the project started in 2012 and as such there was a lot of uncertainty and changes around legislative and survey requirements due to the changes in legislation throughout the life cycle of the project. As such, there has been close consultation with DELWP, Melton City Council and DoE to ensure the project has been complying with all relevant legislation.

Stakeholder	Comments
Melton City Council	<ul style="list-style-type: none">Initial Council Meeting/site walkover on 06/07/2012. Attendees were: Amanda Dodd (Melton City Council (MCC), Coordinator Environmental Planning), Tony Herwerth (MCC, Land Management Officer), Nihal Jayasekara (MCC, Engineer), Sera Jane Peters (MCC, Heritage Advisor), Chinmay Phatak (Western Water, PM), Frank Spykers (MWH, Lead Engineer) and Kylie Annett (MWH, Lead Ecologist).Preliminary plans sent to Melton City Council 5/7/12 for comment (various revisions sent following correspondence).Melton City Council in principle support (for original alignment) received 11/9/12.On-site meeting with Council and DELWP on 1/05/2013 to discuss whole alignment. Council and DELWP did not have any concerns about Greigs Rd West, therefore focused on the alignment inside the MSA area. Attendees were: Bryan Roberts (MCC, Environmental Planner), Tony Herwerth (MCC, Land Management Officer), Virginia McLeod (DELWP Biodiversity Officer), Derek Robertson (Western Water), Chinmay Phatak (Western Water, Project Engineer), Frank Spykers (MWH, Lead Engineer) and Carly Martin (MWH, Senior Ecologist).On-going conversations with Bryan Roberts and Bernadette Power (MCC, Environmental Planners) discussing various parts of the project such as:<ul style="list-style-type: none">planning permit requirementsthe impact of changes in legislation occurring during the life cycle of this projectPrecinct Structure PlansReinstatementThreatened species management plans for various threatened species across wider alignmentConstruction Environmental Management Plan (CEMP) across the whole alignmentA Spiny Rice Flower translocation plan was submitted to council for review.Design plans consistent with previously approved concepts were forward to Voltaire David (MCC Infrastructure Planning Coordinator) on 29/05/15 to reinitiate project after a delay.Design plans were forward to Kate Barclay (MCC, Strategic Planner) on 10/06/15 and a meeting was held at the MCC office on 15/06/15 to discuss the environmental approvals required and reinstatement requirements.Pre-application meeting with Council to discuss the Rockbank Sewer Rising Main project and specific planning permit issues on 01/02/2016. Attendees were: Derek Robertson (Western Water), Kate Barclay (Senior Strategic Planner, MCC), Margaret Brennan (Environmental Services Coordinator, MCC), Lawrie Conole (Environmental Planner, MCC), Brendan McRae (Major Developments Planner, MCC), Sian Smith (Coordinator Major Developments, MCC), Kelly Archibald (Coordinator City Strategy, MCC), Frank Spykers (MWH Lead Engineer), Carly Martin (MWH Senior Ecologist) and Kylie Annett (MWH Lead Ecologist).

Stakeholder	Comments
	<ul style="list-style-type: none"> Correspondence with MCC Heritage Advisor Sera-Jane Peters regarding mitigation measures to protect dry stone walls during construction (04/02/16 and 19/02/16)
DELWP	<ul style="list-style-type: none"> Initial DELWP Meeting/site walkover on 18/07/2012. Attendees were: Suriya Vij (DELWP, Biodiversity Officer), Chinmay Phatak (Western Water, PM), Frank Spykers (MWH, Lead Engineer) and Kylie Annett (MWH, Lead Ecologist) – DELWP had no concerns for Greigs Rd West therefore this meeting was focused around the alignment inside the MSA area. Survey requirements clarified with DELWP (Suriya Vij) 26/9/12 and further clarifications 23/10/12. Meeting with DELWP at DELWP office on 10/10/13 to discuss changes in alignment and requirements under the BCS for areas inside the MSA area. Attendees were: Virginia McLeod (DELWP, Senior Biodiversity Officer) and Kathy Preece (DELWP, Melbourne Strategic Assessment), Chinmay Phatak (Western Water, PM), Frank Spykers (MWH, Lead Engineer) and Kylie Annett (MWH, Lead Ecologist). On-site meeting with Council and DELWP on 1/05/2013 to discuss whole alignment. Council and DELWP did not have any concerns about Greigs Rd West, therefore focused on the alignment inside the MSA area. Attendees were: Bryan Roberts (MCC, Environmental Planner), Tony Herwerth (MCC, Land Management Officer), Virginia McLeod (DELWP Biodiversity Officer), Derek Robertson (Western Water), Chinmay Phatak (Western Water, Project Engineer), Frank Spykers (MWH, Lead Engineer) and Carly Martin (MWH, Senior Ecologist). Numerous phone and email conversations discussing various parts of the project such as: <ul style="list-style-type: none"> Requirements under the BCS the impact of changes in legislation occurring during the life cycle of this project Ongoing liaison with Chris Johnston (MSA Department) regarding submission of shapefiles and the proposed works (2015-2016) Liaison with Jessica Millett-Riley (MSA Department) regarding translocation of Spiny Rice-flowers within the MSA area. Jessica confirmed that no salvage and translocation or seed collection for Spiny Rice-flowers will be required at the site (11/04/2016).
DoE	<ul style="list-style-type: none"> Phone and email conversations discussing various parts of the project such as: <ul style="list-style-type: none"> Requirements for surveys for land both outside the MSA area and within the MSA area during the time when the BCS was endorsed but not yet approved Requirements for EPBC referral – advice given by Steve Mercer on 3/12/2012 was that the project referral will be managed by the EPBC Act Strategic Approvals Section of the department the impact of changes in legislation occurring during the life cycle of this project Phone call with Felicity Jones on 19/02/14 to confirm that the EPBC referral would only be required for the section along Greigs Rd West as the rest of the alignment is covered under the BCS. Email from Ross Rowe (Strategic Approvals East) on 24/02/14 confirming Part 9 referral approach
VicRoads	<ul style="list-style-type: none"> Preliminary plans sent to VicRoads 13/7/12 for comment VicRoads in principle support received 17/8/12 Meeting with VicRoads on 27/06/13
Pinkerton Landcare Group	<ul style="list-style-type: none"> A powerpoint presentation and question/answer session was held on the evening of 18 June 2013 with the local community group that undertakes maintenance of the native vegetation within the road reserves.
Melbourne Water	<ul style="list-style-type: none"> Consultation with Melbourne Water has occurred for the wider project (within the MSA area), but is not relevant for the section along Greigs Rd West or Mount Cottrell Rd (this referral).

2.7 A staged development or component of a larger project

If you have identified that the proposed action is a component of a larger action (in section 1.12) you must complete this section. Provide information about the larger action and details of any interdependency between the stages/components and the larger action. You may also provide justification as to why you believe it is reasonable for the referred action to be considered separately from the larger proposal (eg. the referred action is 'stand-alone' and viable in its own right, there are separate responsibilities for component actions or approvals have been split in a similar way at the state or local government levels).

The overall alignment is approximately 8 km long (refer attached plans), however the majority of this is within the Melbourne Strategic Assessment (MSA) area (Western Growth Corridor – Melton to Wyndham) and therefore outside the area requiring approval (this referral only applies to the additional 2.2 km). The nominal pipeline diameters for works within the MSA are as follows:

- A OD450 (Outside Diameter) sewer rising main along Greigs Road to Troups Road North and along Troups Road North to an area just north of the Melbourne-Ballarat railway line. At this location it will connect into the proposed Rockbank Sewerage Pump Station at 11 Troups Road north (subject of approved planning permit PA2015/4981).

Although the section of the alignment along Greigs Road West and Mount Cottrell Road is not considered independent of the section within the MSA area in terms of construction, it is reasonable for the referred action to be considered separately due to the different legislation and processes in place (i.e. the area within the MSA (covered by the Biodiversity Conservation Strategy)). This interpretation has been confirmed during a phone conversation with Felicity Jones (19/02/2014) and an email from Ross Rowe (24/02/2014) (attached).

3 Description of environment & likely impacts

3.1 Matters of national environmental significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest.

Your assessment of likely impacts should refer to the following resources (available from the Department's web site):

- specific values of individual World Heritage properties and National Heritage places and the ecological character of Ramsar wetlands;
- profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;
- *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance*; and
- associated sectoral and species policy statements available on the web site, as relevant.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The Minister has prepared four marine bioregional plans (MBP) in accordance with section 176. It is likely that the MBP's will be more commonly relevant where listed threatened species, listed migratory species or a Commonwealth marine area is considered.

Note that even if your proposal will not be taken in a World Heritage area, Ramsar wetland, Commonwealth marine area, the Great Barrier Reef Marine Park or on Commonwealth land, it could still impact upon these areas (for example, through downstream impacts). Consideration of likely impacts should include both direct and indirect impacts.

3.1 (a) World Heritage Properties

Description

There are no World Heritage Properties within a 2 km radius of the proposed alignment.

Nature and extent of likely impact

Address any impacts on the World Heritage values of any World Heritage property.

Nil

3.1 (b) National Heritage Places

Description

There are no National Heritage Places within a 2 km radius of the proposed alignment.

Nature and extent of likely impact

Address any impacts on the National Heritage values of any National Heritage place.

Nil

3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

Description

The works are approximately 20 km upstream from the Port Philip Bay (western shoreline) and Bellarine Ramsar wetland.

Nature and extent of likely impact

Address any impacts on the ecological character of any Ramsar wetlands.

The works will not impact on the Ramsar wetland. The works are being undertaken in the road reserve and Greigs Rd West does not contain any watercourses, wetlands or stormwater drains. Additionally, a Construction Environmental Management Plan (CEMP) will be in place which will outline mitigations around sediment control.

3.1 (d) Listed threatened species and ecological communities

Description

An updated Protected Matters Search Report was undertaken on 21/02/2014. The report identified four listed Threatened Ecological Communities as either may, likely or known to occur in the area. The communities and presence or absence, including justifications are as follows:

Name	Present or Absent	Justification
Grassy Eucalypt Woodland of the Victorian Volcanic Plain	Absent	Trees were largely absent from the works area along Greigs Rd West.
Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia	Absent	No Grey Box were recorded within the works area.
Natural Temperate Grassland of the Victorian Volcanic Plain	Present (degraded form)	Using the flow chart on page 22 of the EPBC Act guide (DSEWPC 2011), two patches of native vegetation met criteria to be classified as the grassland community due to the non-grass weeds comprising less than 30% of ground cover.
Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains	Absent	No wetlands were recorded within the road reserve and no wetland flora species were observed.

The EPBC Protected Matters Report identified 20 threatened species or species habitat that are known, may, or are likely to occur within 2 km of the area (as denoted in parentheses):

- Six birds – Regent Honeyeater (known), Australasian Bittern (likely), Swift Parrot (likely), Plains-wanderer (likely), Australian Painted Snipe (likely) and Australian Fairy Tern (likely)
- Two fish – Eastern Dwarf Galaxias (likely) and Australian Grayling (likely)
- One frog – Growling Grass Frog (known)
- One insect – Golden Sun Moth (may)
- Two mammals – New Holland Mouse (may) and Grey-headed Flying Fox (likely)
- Two reptiles – Striped Legless Lizard (known) and Grassland Earless Dragon (may)
- Six plant species – Curly Sedge (likely), Matted Flax-lily (known), Clover Glycine (likely), Spiny Rice-flower (likely), Maroon Leek-orchid (likely) and Large-fruit Fireweed (likely).

Nature and extent of likely impact

Address any impacts on the members of any listed threatened species (except a conservation dependent species) or any threatened ecological community, or their habitat.

The construction of the pipeline will impact on (remove or disturb) two patches of EVC 132_61 Plains Grassland, which equals a total of **1.231 hectares (0.366 Habitat hectares)**. These patches also meet the threshold criteria to be classified as Natural Temperate Grassland of the Victorian Volcanic Plain. This vegetation was largely dominated by patches of Kangaroo Grass along with scattered Spear Grass and Wallaby-grass. These patches were considered degraded forms of the grassland community due to the lack of diversity (lack of herbs, non-tufted graminoids, bryophytes and lichen), and the high cover of Chilean Needle Grass (*Nassella neesiana*) which is a declared noxious weed. The high cover of Kangaroo Grass and Chilean Needle Grass contributed to the classification of the patches as sufficient quality for national listing by meeting the 'non-grass weeds comprise less than 30% of ground cover' criteria. Mount Cottrell Rd is dominated by exotic grasses and did not meet the requirements of a patch of native vegetation.

The works are unlikely to have a significant impact on any of the listed threatened flora or fauna species mentioned above. No threatened flora or fauna species were recorded during the site assessments. Species habitat and breeding preferences were researched during the preliminary phase of the project, which included reading EPBC SPRAT Profiles. The works area along Greigs Road was surveyed intensively nine times from November 2012 until October 2013, resurveyed to determine vegetation condition on 10/12/2015 and was visited on numerous other occasions therefore the MWH Ecologists have an intimate knowledge of the road reserve and the species present or likely to be present.

The road reserve is managed, with regular grading along the road edge and slashing of the vegetation. As such, the likelihood of threatened birds or mammals nesting within the road reserve is very unlikely. There are no watercourses or stormwater drains within the vicinity of the road reserve therefore there is no habitat for threatened fish or frogs.

While there was a small amount of surface rock present towards the eastern end of the Greigs Road West road reserve and a dry stone wall occurs along the property boundary, it is considered that there is a low risk of impacting on either Striped Legless Lizard or potential habitat due to the highly modified and heavily managed nature of the sections of road reserve within the proposed construction zone.

Golden Sun Moth surveys were undertaken within the native grassland areas along the Greigs Rd West road reserve according to DoE standards (DEWHA 2009). Surveys were undertaken on the same days as positive sightings of the species at known reference sites nearby, to confirm that the species was active within the area during the time of assessment. Despite positive recordings of the species at the nearby Eynesbury reference site on all survey days (reference site located approximately 4.4km south west of the subject site) no Golden Sun Moths were recorded within the subject site during the survey period. Given the absence of positive recordings of the species during the survey period and the highly managed condition of the proposed section of road reserve, it is considered highly unlikely that the proposed construction footprint contains critical habitat for the Golden Sun Moth and highly unlikely that the proposed works will have a significant impact on the species.

None of the threatened flora species mentioned above were recorded on site. Given the intensive field assessments (including habitat hectare assessments using the random meander method, threatened flora surveys using the transect method, and Golden Sun Moth surveys using the transect method) the likelihood of threatened species being present but missed during surveys is very low.

3.1 (e) Listed migratory species

Description

The EPBC Act Protected Matters Report identified 12 listed migratory species or species habitat which may or are likely to occur within the area or species which may or are likely to breed within the area (2 km buffer around proposed alignment). These included one migratory marine bird; seven migratory terrestrial bird species; and four migratory wetland bird species.

Nature and extent of likely impact

[Address any impacts on the members of any listed migratory species, or their habitat.](#)

None of these migratory species were recorded during the site assessments and the lack of habitat and highly managed nature of the road reserve result in a very low likelihood of these species being impacted by works.

3.1 (f) Commonwealth marine area

(If the action is in the Commonwealth marine area, complete 3.2(c) instead. This section is for actions taken outside the Commonwealth marine area that may have impacts on that area.)

Description

There are no Commonwealth Marine Areas within a 2 km radius of the proposed alignment.

Nature and extent of likely impact

[Address any impacts on any part of the environment in the Commonwealth marine area.](#)

Nil

3.1 (g) Commonwealth land

(If the action is on Commonwealth land, complete 3.2(d) instead. This section is for actions taken outside Commonwealth land that may have impacts on that land.)

Description

If the action will affect Commonwealth land also describe the more general environment. The Policy Statement titled *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* provides further details on the type of information needed. If applicable, identify any potential impacts from actions taken outside the Australian jurisdiction on the environment in a Commonwealth Heritage Place overseas.

Defence – Radio receiving Station – Rockbank is located within 2 km of the proposed works.

Nature and extent of likely impact

Address any impacts on any part of the environment in the Commonwealth land. Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
- natural and physical resources;
- the qualities and characteristics of locations, places and areas;
- the heritage values of places; and
- the social, economic and cultural aspects of the above things.

Given that works are restricted to the road reserve, there is no risk that the Radio Receiving Station will be impacted.

3.1 (h) The Great Barrier Reef Marine Park

Description

The works are not near and will not have any impacts on the Great Barrier Reef Marine Park.

Nature and extent of likely impact

Address any impacts on any part of the environment of the Great Barrier Reef Marine Park.

NIL

Note: If your action occurs in the Great Barrier Reef Marine Park you may also require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If so, section 37AB of the GBRMP Act provides that your referral under the EPBC Act is deemed to be an application under the GBRMP Act and Regulations for necessary permissions and a single integrated process will generally apply. Further information is available at www.gbrmpa.gov.au

3.1 (i) A water resource, in relation to coal seam gas development and large coal mining development

Description

If the action is a coal seam gas development or large coal mining development that has, or is likely to have, a significant impact on water resources, the draft *Policy Statement Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources* provides further details on the type of information needed.

The action is not a coal seam gas development or large coal mining development

Nature and extent of likely impact

Address any impacts on water resources. Your assessment of impacts should refer to the draft *Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources*.

N/A

3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

You must describe the nature and extent of likely impacts (both direct & indirect) on the whole environment if your project:

- is a nuclear action;
- will be taken by the Commonwealth or a Commonwealth agency;

- will be taken in a Commonwealth marine area;
- will be taken on Commonwealth land; or
- will be taken in the Great Barrier Reef marine Park.

Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
- natural and physical resources;
- the qualities and characteristics of locations, places and areas;
- the heritage values of places; and
- the social, economic and cultural aspects of the above things.

3.2 (a)	Is the proposed action a nuclear action?	✓	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

3.2 (b)	Is the proposed action to be taken by the Commonwealth or a Commonwealth agency?	✓	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

3.2 (c)	Is the proposed action to be taken in a Commonwealth marine area?	✓	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(f))

3.2 (d)	Is the proposed action to be taken on Commonwealth land?	✓	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))

3.2 (e)	Is the proposed action to be taken in the Great Barrier Reef Marine Park?	✓	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))

3.3 Other important features of the environment

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed above). If at Section 2.3 you identified any alternative locations, time frames or activities for your proposed action, you must complete each of the details below (where relevant) for each alternative identified.

3.3 (a) Flora and fauna

No threatened flora or fauna species were recorded within the Greigs Rd West or Mount Cottrell road reserves. Two areas meeting criteria for degraded Natural Temperate Grassland of the Victorian Volcanic Plain were recorded and are within the proposed works area (refer to Section 3.1d).

The following information is from the flora and fauna assessment of the entire alignment and therefore gives a broader view of the area:

Fauna species were recorded by both direct sightings and indirect observations including presence of audible calls and scats. Fauna survey activities were restricted to general observations during the day, including assessing the presence of suitable habitat, rock-rolling and assessing for signs of fauna activity.

A total of 16 fauna species (13 native and 3 introduced) were observed (or scats observed) or heard calling from within or near the proposed works areas during the assessment. Many of these species were native birds common in rural and low-density residential areas such as Australian Magpies (*Cracticus tibicen*), Little Ravens (*Corvus mellori*) and Superb Fairy-wrens (*Malurus cyaneus*) either seen or heard calling from the area. Many of the other species observed consisted of waterbirds including White-necked Heron (*Ardea pacifica*), Yellow-billed Spoonbill (*Platalea flavipes*) and Australian White Ibis (*Threskiornis molucca*), all of which were observed within the Troups Road North swamp when it was seasonally inundated. Use of the area by European Rabbits (*Oryctolagus cuniculus*) was evident via the recording of scats within the area. Two dead Blue Tongue Skinks (*Tiliqua scincoides*) were observed lying on the side of the road (likely road kills) over the course of the surveys. While not observed, it is expected that other common reptile species may inhabit and utilise the numerous rock walls located adjacent to the proposed construction zone.

A total of 69 flora species were recorded within the (overall) Subject site and immediate surrounds during the detailed site assessment. Of these 69 species, 29 were native, 36 species were exotic and a further four species have been planted outside of their natural range. Species recorded within the wider area included one nationally listed species, Spiny Rice-flower (*Pimelea spinescens* subsp. *spinescens*) (located outside of the area subject to this referral) and a number of listed declared noxious weed species including Blackberry (*Rubus fruticosus* spp. agg.), Sweet Briar (*Rosa rubiginosa*), Serrated Tussock (*Nassella trichotoma*), Fennel (*Foeniculum vulgare*) and Chilean Needle-grass (*Nassella neesiana*).

In general, the majority of the vegetation located along the length of the (entire) alignment is highly modified and largely consists of modified grassland dominated by a combination of exotic and native grass species, with occasional trees and shrubs. This is largely due to the location of the construction corridor largely restricted to the first 10-15m from the edge of the road, where the vegetation is more degraded. Some grassland 'patches' exist along Greigs Road and Greigs Road West in particular, and are largely dominated by a thick coverage of Kangaroo Grass (*Themeda triandra*), along with Spear Grass (*Austrostipa* sp.) and Wallaby-grass (*Rytidosperma* sp.). These areas consist of greater than 25% cover of native flora species in the understorey, therefore meeting the criteria to be classified as 'patches' of Plains Grassland EVC-quality vegetation (EVC 132_62). As a general rule, vegetation within the first five metres of the road edge is highly modified and dominated by exotic grass species, with gravel extending 1-2 metres from the edge of bitumen.

Two populations of the nationally listed flora species Spiny Rice-flower were identified along the northern side of the Greigs Road road reserve (within MSA area) and will be impacted by the proposed works. Works in this area have been designed in close consultation with DELWP and Council. Targeted surveys for this species were undertaken along Greigs Road West however no Spiny Rice-flower plants were recorded.

3.3 (b) Hydrology, including water flows

There are no watercourses or stormwater drains within the vicinity of the road reserve. Additionally, no depressions containing standing water were identified along Greigs Rd West or Mount Cottrell Rd and no areas likely to support ephemeral wetlands, drainage lines or water bodies were identified at the time of assessment.

The closest river to Greigs Rd West and Mount Cottrell Rd is Werribee River, which is approximately 1.5 km from the affected area. Given that there is no drainage from the road reserve to Werribee River, the river will not be affected by works. Kororoit Creek runs through the section of the alignment that falls within the MSA area therefore close consultation has occurred with DELWP and Council to ensure this creek is protected during works.

3.3 (c) Soil and Vegetation characteristics

The site is situated within the Victorian Volcanic Plain bioregion. Modelled pre-1750 Ecological Vegetation Class (EVC) mapping describes the affected site as containing EVC 132 Plains Grassland (DEPI 2013). This EVC has a bioregional conservation status of Endangered. The Extant EVC mapping shows EVC-quality vegetation persists but has become fragmented (DSE 2012).

The typical soil profile of the entire proposed alignment was investigated and summarised by NSP Geotechnics (2012) as follows:

Either Fill: clayey/sandy gravel, clayey silt, silty/gravelly clay or natural topsoil: Clayey silt/clay; fine to coarse sands and gravels, high plasticity clays, blow plasticity silts, brown and grey, dry to moist, stiff to very stiff or medium dense and typically extending to depths ranging from 0.2 to 1.6 metres.

Overlaying silty/gravelly clay (CH); high plasticity, brown and grey, moist, stiff to very stiff, fine to medium gravels and extending to depths ranging from 0.6 to 4.2 metres.

Overlaying Basalt, extremely to slightly weathered, brown and grey, dry, medium to very high strength and extending to the borehole termination/refusal depths ranging from 0.6 to 10.10 metres.

The groundwater table was not encountered in the boreholes along Greigs Rd West.

3.3 (d) Outstanding natural features

There are no outstanding natural features within Greigs Rd West or Mount Cottrell Rd road reserves.

3.3 (e) Remnant native vegetation

Two areas meeting criteria for degraded Natural Temperate Grassland of the Victorian Volcanic Plain were recorded and are within the proposed works area (refer to Section 3.1d).

3.3 (f) Gradient (or depth range if action is to be taken in a marine area)

The alignment follows the natural surface profile of land, which has a relatively flat topography

3.3 (g) Current state of the environment

[Include information about the extent of erosion, whether the area is infested with weeds or feral animals and whether the area is covered by native vegetation or crops.](#)

The first 5m of vegetation from the road edge is highly disturbed and dominated by Carpet Weed (*Galenia pubescens*) (a non-grassy weed), with gravel extending 1-2 metres from the edge of bitumen. The road reserve is managed (vegetation regularly slashed) and undergoes periodic grading along the edge closest to the road. The presence of non-grassy weeds in this 5m width closest to the road edge is greater than 30% along the Greigs Rd West road reserve so this section was excluded from the 'patches' of grassland vegetation assessed as it did not meet the threshold to be considered Natural Temperate Grassland of the Victorian Volcanic Plain or Plains Grassland (less than 25% cover of native flora species in the understorey). The remaining vegetation within the construction zone is largely dominated by Kangaroo Grass along with scattered Spear Grass and Wallaby-grass, along with exotic grass species including Cocksfoot (*Dactylis glomerata*), Wild Oat (*Avena* sp.) and Onion Grass (*Romulea rosea*).

A number of listed noxious weed species were recorded in the area including Blackberry (*Rubus fruticosus* spp. agg.), Sweet Briar (*Rosa rubiginosa*), Paterson's Curse (*Echium plantagineum*) and Serrated Tussock (*Nassella trichotoma*), all of which are Regionally Controlled noxious weed species within the Port Phillip and Westernport Catchment Management Region (Melville 2008). Other declared noxious weeds recorded were Fennel (*Foeniculum vulgare*) and Chilean Needle-grass (*Nassella neesiana*) (dominant throughout the study area), both of which are Restricted species within the Port Phillip and Westernport Catchment Management Region.

The remaining 10m of the first patch (Habitat Zone, HZ1) (for the entire length of the HZ) did meet the threshold due to both of the above points – dominant native species exceeded 50% cover and non-grassy weeds was <30%. The section of HZ1 considered representative of Natural Temperate Grassland of the Victorian Volcanic Plain equals 0.539ha in size.

The diversity and quality of the vegetation within the second patch (HZ2) overall was considered lower than HZ1. Again the first 5m from the road edge was highly disturbed and did not reach the threshold to be considered representative of the threatened ecological community due to greater than 30% cover of Carpet Weed. Within the remaining 10m wide corridor of HZ2 the presence of the dominant native species did not exceed 50% cover. However, non-grassy weeds did not exceed 30% and as such this remaining section of HZ2 met the threshold to be considered Natural Temperate Grassland of the Victorian Volcanic Plain. The section of HZ2 considered representative of Natural Temperate Grassland of the Victorian Volcanic Plain equals 0.692ha in size.

3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values

There are no Commonwealth Heritage Places within 2 km of the study site (DoE 2014). There are no places recognised as having heritage values along Greigs Rd West (Stone 2013).

There is a dry stone wall along the Greigs Road West boundary fence that has recently been included in a heritage overlay amendment under the Melton Planning Scheme. This will be protected by restricting all works to at least 5m from the wall, with the exception of a small section (outside the area of this referral) where the works may temporarily encroach within approximately 3-4m of the stone wall. Liaison with Melton City Council's heritage officer has been ongoing in order to ensure that strict mitigation measures are in place to protect this section of the stone wall during construction.

3.3 (i) Indigenous heritage values

A Cultural Heritage Due Diligence assessment was undertaken by Tim Stone in 2013 along the alignment of the overall project. There are four Aboriginal sites located in the vicinity of the works; two located along Troups Road North and two located at Leakes Road interchange. All of these sites are located outside the proposed Greigs Rd West & Mount Cottrell Rd works.

3.3 (j) Other important or unique values of the environment

Describe any other key features of the environment affected by, or in proximity to the proposed action (for example, any national parks, conservation reserves, wetlands of national significance etc).

There are no other additional important or unique values in the proximity of the proposed action.

3.3 (k) Tenure of the action area (eg freehold, leasehold)

The Road Reserve is managed by Melton City Council.

3.3 (l) Existing land/marine uses of area

The alignment is within road reserve. Future road widening is planned for the area therefore some of the area disturbed by the action will ultimately be removed for road extensions anyway.

3.3 (m) Any proposed land/marine uses of area

The existing land/marine uses described in 3.3l will not change as a result of this project.

4 Measures to avoid or reduce impacts

Note: If you have identified alternatives in relation to location, time frames or activities for the proposed action at Section 2.3 you will need to complete this section in relation to each of the alternatives identified.

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

For any measures intended to avoid or mitigate significant impacts on matters protected under the EPBC Act, specify:

- what the measure is,
- how the measure is expected to be effective, and
- the time frame or workplan for the measure.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

Provide information about the level of commitment by the person proposing to take the action to achieve the proposed environmental outcomes and implement the proposed mitigation measures. For example, if the measures are preliminary suggestions only that have not been fully researched, or are dependent on a third party's agreement (e.g. council or landowner), you should state that, that is the case.

Note, the Australian Government Environment Minister may decide that a proposed action is not likely to have significant impacts on a protected matter, as long as the action is taken in a particular manner (section 77A of the EPBC Act). The particular manner of taking the action may avoid or reduce certain impacts, in such a way that those impacts will not be 'significant'. More detail is provided on the Department's web site.

For the Minister to make such a decision (under section 77A), the proposed measures to avoid or reduce impacts must:

- clearly form part of the referred action (e.g. be identified in the referral and fall within the responsibility of the person proposing to take the action),
- be must be clear, unambiguous, and provide certainty in relation to reducing or avoiding impacts on the matters protected, and
- must be realistic and practical in terms of reporting, auditing and enforcement.

If a proposed action is determined to be a controlled action, the Department may request further details to enable application of the *Outcomes-based Conditions Policy 2016* (<http://www.environment.gov.au/epbc/publications/outcomes-based-conditions-policy-guidance>), including information about the environmental outcomes to be achieved by proposed avoidance, mitigation, management or offset measures, details of baseline data, milestones, performance criteria, and monitoring and adaptive management to ensure the achievement of outcomes. If this information is available at the time of referral it should be included in the description of the proposed measures.

More general commitments (e.g. preparation of management plans or monitoring), commitments to achieving environmental outcomes and measures aimed at providing environmental offsets, compensation or off-site benefits CANNOT be taken into account in making the initial decision about whether the proposal is likely to have a significant impact on a matter protected under the EPBC Act. (But those commitments may be relevant at the later assessment and approval stages, including the appropriate level of assessment, if your proposal proceeds to these stages).

The Rockbank Rising Main project will result in disturbance to 1.231 ha of a degraded form of the nationally listed community NTGVVP. The vegetation is fragmented and subject to ongoing disturbance through regular grading, mowing and slashing. While the community exists at the site, it is not considered to result in a Significant Impact on a Matter of National Significance due to the following:

- The site is fragmented, degraded and highly managed, including being subjected to regular mowing and slashing
- The planned works will not remove the entire community at the site, and given the strict mitigation and high level of reinstatement required by Council, the works are not expected to lead to a long-term decrease in the size of the grassland community
- The works are not considered to adversely affect habitat critical to the survival of the ecological community
- The works are not expected to cause a substantial change in the species composition of an occurrence of the ecological community, such as a decline or loss of functionally important species. The native grassland species at the site largely consist of common native grass species including Kangaroo Grass (dominant), Spear Grass and Wallaby Grass, with a low diversity of common native lilies and herbs.

Strict environmental mitigation measures to minimise the impact of the planned works have been developed for the project. These include:

- Restriction of the construction corridor
- Development of a comprehensive Construction Environmental Management Plan (CEMP) including a monitoring program prior to, during and following construction
- Extensive liaison with stakeholders including DELWP, MCC, heritage advisors, DoE
- Intensive reinstatement and rehabilitation in line with Council's requirements

The amount of NTGVVP proposed for disturbance will be minimised using the following methods:

Construction Environmental Management Plan (CEMP)

A CEMP has been prepared for the project which includes but is not limited to the following:

- key environmental issues/values of the site
- management of flora and fauna values
- site access and timing
- storage and material stockpiling
- fire management
- management of noise and dust
- weed and pathogen control
- erosion and sediment control
- restoration and rehabilitation

The CEMP be finalised and signed off prior to works commencing. An Ecologist will induct all site personnel to the site prior to works and will perform audits during construction to ensure works are being undertaken in line with the CEMP.

Reduced construction corridor

The construction corridor will be restricted to 15 m wide along Greigs Rd West and will be delineated by star pickets and flagging tape to ensure the restrictions are adhered to during construction. The flagging tape will be installed prior to any vegetation removal or disturbance taking place in this area. The Project Ecologist will inspect the installation of the star pickets and flagging tape to ensure they are in the correct location.

The width required to undertake the works is dictated by the size of the trench required to house the pipe and the size of the machinery required to install the pipe. Initial plans located the pipe close to the road edge (within the lowest quality vegetation), however the location of the trench within the road reserve has been dictated by Melton City Council. Advice from Voltaire David (Infrastructure Planning Coordinator, Melton City Council) was as follows: "The centre of pipes must be located a minimum 10m away from the existing edge of the road pavement and a minimum 5m away from the property boundary on the south side." These constraints are due to a dry stone wall running the length of the property boundary, and future road widening which is planned for the area.

Environmental Offsets

A Planning Permit for Vegetation Removal is required for the removal of these two patches under Clause 52.17 of the Melton Planning Scheme and will be submitted in May 2016. A Biodiversity Impact and Offset Requirements Report has been generated using DELWP's Native Vegetation Information Management (NVIM) system. The report has determined the following offset requirements for the removal of **1.231 hectares (0.366 Habitat hectares)** under the Guidelines if a permit is granted:

0.461 general biodiversity units with a minimum strategic biodiversity score of 0.672 to be offset within the Port Philip and Westernport Catchment Management Authority (CMA) or Melton City Council.

Following ongoing discussions with DELWP, the offset strategy options available to Western Water for the removal of the two patches along Greigs Rd West was determined as follows:

- Primary Strategy: Secure offsets as per the Native Vegetation Guidelines as identified within the Biodiversity Impact and Offset Requirements Report. A quote has been provided by Nick Lewis, Director of Vegetation Link, who has identified a landowner who has appropriate credits available. The quote includes a 10-year Management Plan endorsed by the DELWP Native Vegetation Credit Register.
- Secondary Strategy: Secure offsets on Western Water owned property (first party offsets) subject to suitability and agreement with DELWP. A suitable property has been identified and the potential to use this property to secure offsets for the current project may be investigated.

5 Conclusion on the likelihood of significant impacts

Identify whether or not you believe the action is a controlled action (i.e. whether you think that significant impacts on the matters protected under Part 3 of the EPBC Act are likely) and the reasons why.

5.1 Do you THINK your proposed action is a controlled action?

- ☒ No, complete section 5.2
- ☐ Yes, complete section 5.3

5.2 Proposed action IS NOT a controlled action.

Specify the key reasons why you think the proposed action is NOT LIKELY to have significant impacts on a matter protected under the EPBC Act.

As mentioned throughout this referral, the NTGVVP recorded within Greigs Rd West was degraded with low diversity of flora species and very low likelihood of providing habitat to threatened flora or fauna species. The NTGVVP did not appear to extend into the neighbouring property and as such the degraded form of NTGVVP within Greigs Rd West road reserve is relatively isolated and at ongoing risk of degradation from weed species occurring on neighbouring properties (including noxious weed species such as Serrated Tussock and Chilean Needle-grass). Noxious weed species including Chilean Needle-grass and Paterson's Curse currently occur throughout the grassland community. No EPBC-listed species and no other Matters of National Environmental Significance are expected to be impacted by the planned works.

In summary, the project should not be considered a controlled action as it is unlikely to cause a significant impact on any Matter of National Environmental Significance due to the following reasons:

1. Native vegetation and habitat will be largely avoided and protected due to considerations in design and strict mitigation measures to be implemented during construction
2. In the very unlikely event that threatened fauna are encountered within the construction corridor during works, the action is very unlikely to trigger significant impact thresholds;
3. In the unlikely event that threatened fauna are encountered within the construction corridor during works, the action is very unlikely to trigger significant impact thresholds;
4. The mitigations and avoidance measures outlined in Section 4 will be followed;
5. Works will be undertaken in accordance with a Construction Environmental Management Plan, specific contingency action plans, and any conditions of permits and approvals

5.3 Proposed action IS a controlled action

Type 'x' in the box for the matter(s) protected under the EPBC Act that you think are likely to be significantly impacted. (The 'sections' identified below are the relevant sections of the EPBC Act.)

Matters likely to be impacted

<input type="checkbox"/>	World Heritage values (sections 12 and 15A)
<input type="checkbox"/>	National Heritage places (sections 15B and 15C)
<input type="checkbox"/>	Wetlands of international importance (sections 16 and 17B)
<input type="checkbox"/>	Listed threatened species and communities (sections 18 and 18A)
<input type="checkbox"/>	Listed migratory species (sections 20 and 20A)
<input type="checkbox"/>	Protection of the environment from nuclear actions (sections 21 and 22A)
<input type="checkbox"/>	Commonwealth marine environment (sections 23 and 24A)
<input type="checkbox"/>	Great Barrier Reef Marine Park (sections 24B and 24C)
<input type="checkbox"/>	A water resource, in relation to coal seam gas development and large coal mining development

	(sections 24D and 24E)
	Protection of the environment from actions involving Commonwealth land (sections 26 and 27A)
	Protection of the environment from Commonwealth actions (section 28)
	Commonwealth Heritage places overseas (sections 27B and 27C)

Specify the key reasons why you think the proposed action is likely to have a significant adverse impact on the matters identified above.

6 Environmental record of the responsible party

NOTE: If a decision is made that a proposal needs approval under the EPBC Act, the Environment Minister will also decide the assessment approach. The EPBC Regulations provide for the environmental history of the party proposing to take the action to be taken into account when deciding the assessment approach.

	Yes	No
<p>6.1 Does the party taking the action have a satisfactory record of responsible environmental management?</p> <p>Provide details Party has accepted the recommendations of their biodiversity consultants.</p> <p>Western Water has established an Environmental Policy and Strategic Intent to provide services within the carrying capacity of nature and inspire others to do the same. The party reports its performance annually through a Sustainability Report (which is now included in the Annual Corporate Report).</p> <p>Western Water's Environmental Policy is available at: http://www.westernwater.com.au/Community-Education/Environment/Environment-Policy</p>	✓	
<p>6.2 Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources?</p> <p>If yes, provide details</p>		✓
<p>6.3 If the party taking the action is a corporation, will the action be taken in accordance with the corporation's environmental policy and planning framework?</p> <p>If yes, provide details of environmental policy and planning framework</p> <p>The principles and practices of sustainability are incorporated throughout everything that Western Water does. This is based on a belief that all people, as individuals and communities, must play a part in protecting and preserving our finite water resources.</p> <p>Western Water's Environmental Policy is available at: http://www.westernwater.com.au/Community-Education/Environment/Environment-Policy</p>	✓	
<p>6.4 Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?</p> <p>Provide name of proposal and EPBC reference number (if known) Water Utilities Infrastructure for Waterford Development Melton South, VIC. EPBC Ref: 2011/6083 Decision on referral: not a controlled action</p>	✓	

7 Information sources and attachments

(For the information provided above)

7.1 References

- List the references used in preparing the referral.
- Highlight documents that are available to the public, including web references if relevant.
- Department of the Environment, Water, Heritage and the Arts (DEWHA) (2009)**. Significant impact guidelines for the critically endangered Golden Sun Moth (*Synemon plana*). Department of the Environment, Water, Heritage and the Arts, Commonwealth of Australia.
- Department of Environment and Primary Industries (DEPI) (2013)** *Biodiversity Interactive Mapping* (Extant and Modelled Pre-1750 Ecological Vegetation Classes, Threatened Flora search and Threatened Fauna search, Conservation Area mapping, Habitat Compensation mapping). <http://www.dse.vic.gov.au/dse/index.htm>
- Department of the Environment (DoE) (2013)**. Matters of National Environmental Significance: Significant impact guidelines 1.1. Commonwealth of Australia.
- Department of the Environment (DoE) (2014)**. EPBC Protected Matters Reports, Commonwealth of Australia. Accessed 21/02/2014.
- Department of the Environment (DoE) (2014a)**. Policy Statement for Melbourne urban development proposals needing consideration under Parts 7, 8 and 9 of the EPBC Act. Commonwealth of Australia.
- Melville, R (2008)** *Declared Noxious Weeds – Listed by Scientific Name*. Landcare Notes. Department of Primary Industries. The State of Victoria.
- MWH (2013)** Rockbank and Toolern Sewer, Water & recycled Water Infrastructure: detailed Ecological and Net Gain Assessment. An unpublished report prepared for Western Water by MWH Australia Pty Ltd, Melbourne.
- NSP Geotechnics (2012)** Geotechnical investigation for Rockbank and Toolern Water Pipeline Project. An unpublished report prepared for MWH by NSP Geotechnics Pty Ltd, Melbourne.
- Stone, T (2013)** Rockbank Pipelines Cultural Heritage Due Diligence Assessment. An unpublished report prepared for MWH by Dr Tim Stone, Melbourne.

7.2 Reliability and date of information

For information in section 3 specify:

- source of the information;
- how recent the information is;
- how the reliability of the information was tested; and
- any uncertainties in the information.

The above listed references were used to prepare the information contained in this referral. These references have been compiled by Government Agencies or reputable consultants.

7.3 Attachments

Indicate the documents you have attached. All attachments must be less than three megabytes (3mb) so they can be published on the Department's website. Attachments larger than three megabytes (3mb) may delay the processing of your referral.

		✓ attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the project locality (section 1)	✓	Rockbank_GRW shapefile
	GIS file delineating the boundary of the referral area (section 1)		
	figures, maps or aerial photographs showing the location of the project in respect to any matters of national environmental significance or important features of the environments (section 3)	✓	Rockbank Sewer & Water Infrastructure: Detailed ecological and net gain assessment (MWH 2016)

If relevant, attach	copies of any state or local government approvals and consent conditions (section 2.5)		Planning Permit application to be submitted in May 2016, therefore not included with this submission.
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)	✓	<p>Stone, T (2013) Rockbank Pipelines Cultural Heritage Due Diligence Assessment. An unpublished report prepared for MWH by Dr Tim Stone, Melbourne.</p> <p>NSP Geotechnics (2012) Geotechnical investigation for Rockbank and Toolern Water Pipeline Project. An unpublished report prepared for MWH by NSP Geotechnics Pty Ltd, Melbourne.</p> <p>Email from Council regarding location of pipeline within Greigs Road West</p>
	copies of any flora and fauna investigations and surveys (section 3)	✓	Rockbank Sewer & Water Infrastructure: Detailed ecological and net gain assessment (MWH 2016)
	technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)		
	report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		Not relevant for this section

8 Contacts, signatures and declarations

NOTE: Providing false or misleading information is an offence punishable on conviction by imprisonment and fine (s 489, EPBC Act).

Under the EPBC Act a referral can only be made by:

- the person proposing to take the action (which can include a person acting on their behalf); or
- a Commonwealth, state or territory government, or agency that is aware of a proposal by a person to take an action, and that has administrative responsibilities relating to the action¹.

Project title:

8.1 Person proposing to take action

This is the individual, government agency or company that will be principally responsible for, or who will carry out, the proposed action.

If the proposed action will be taken under a contract or other arrangement, this is:

- the person for whose benefit the action will be taken; or
- the person who procured the contract or other arrangement and who will have principal control and responsibility for the taking of the proposed action.

If the proposed action requires a permit under the Great Barrier Reef Marine Park Act², this is the person requiring the grant of a GBRMP permission.

The Minister may also request relevant additional information from this person.

If further assessment and approval for the action is required, any approval which may be granted will be issued to the person proposing to take the action. This person will be responsible for complying with any conditions attached to the approval.

If the Minister decides that further assessment and approval is required, the Minister must designate a person as a proponent of the action. The proponent is responsible for meeting the requirements of the EPBC Act during the assessment process. The proponent will generally be the person proposing to take the action³.

1. Name and Title:

Mr Graham Holt, General Manager Customer and Community Relations

2. Organisation (if applicable):

WESTERN REGION WATER CORPORATION

3. EPBC Referral Number (if known):

4: ACN / ABN (if applicable):

67 433 835 375

5. Postal address

PO Box 2371, Sunbury DC, VIC 3429

6. Telephone:

03 9218 5523

7. Email:

Graham.Holt@westernwater.com.au

8. Name of proposed proponent (if not the same person at item 1 above and if applicable):

9. ACN/ABN of proposed

¹ If the proposed action is to be taken by a Commonwealth, state or territory government or agency, section 8.1 of this form should be completed. However, if the government or agency is aware of, and has administrative responsibilities relating to, a proposed action that is to be taken by another person which has not otherwise been referred, please contact the Referrals Gateway (1800 803 772) to obtain an alternative contacts, signatures and declarations page.

² If your referred action, or a component of it, is to be taken in the Great Barrier Reef Marine Park the Minister is required to provide a copy of your referral to the Great Barrier Reef Marine Park Authority (GBRMPA) (see section 73A, EPBC Act). For information about how the GBRMPA may use your information, see http://www.gbrmpa.gov.au/privacy/privacy_notice_for_permits.

proponent (if not the same person named at item 1 above):

COMPLETE THIS SECTION ONLY IF YOU QUALIFY FOR EXEMPTION FROM THE FEE(S) THAT WOULD OTHERWISE BE PAYABLE

- I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:
- ☐ an individual; OR
 - ☐ a small business entity (within the meaning given by section 328-110 (other than subsection 328-119(4)) of the *Income Tax Assessment Act 1997*); OR
 - ☐ not applicable.

If you are small business entity you must provide the Date/Income Year that you became a small business entity:

Note: You must advise the Department within 10 business days if you cease to be a small business entity. Failure to notify the Secretary of this is an offence punishable on conviction by a fine (regulation 5.23B(3) *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth)).

COMPLETE THIS SECTION ONLY IF YOU WOULD LIKE TO APPLY FOR A WAIVER

- I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the [EPBC Regulations](#). Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made:
- ☐ not applicable.

Declaration

I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.
I understand that giving false or misleading information is a serious offence.
I agree to be the proponent for this action.
I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature



Date 27/5/16

8.2 Person preparing the referral information (if different from 8.1)

[Individual or organisation who has prepared the information contained in this referral form.](#)

Name Kylie Annett
Title Senior Ecologist
Organisation MWH Australia Pty Ltd
ACN / ABN (if applicable) 17 007 820 322
Postal address Level 21, 28 Freshwater Place, Southbank, VIC 3006
Telephone 03 8855 6043

Email kylie.m.annett@mwhglobal.com

Declaration I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.
I understand that giving false or misleading information is a serious offence.

Signature



Date 2/6/16

REFERRAL CHECKLIST

NOTE: This checklist is to help ensure that all the relevant referral information has been provided. It is not a part of the referral form and does not need to be sent to the Department.

HAVE YOU:

- ☐ Completed all required sections of the referral form?
- ☐ Included accurate coordinates (to allow the location of the proposed action to be mapped)?
- ☐ Provided a map showing the location and approximate boundaries of the project area?
- ☐ Provided a map/plan showing the location of the action in relation to any matters of NES?
- ☐ Provided a digital file (preferably ArcGIS shapefile, refer to guidelines at [Attachment A](#)) delineating the boundaries of the referral area?
- ☐ Provided complete contact details and signed the form?
- ☐ Provided copies of any documents referenced in the referral form?
- ☐ Ensured that all attachments are less than three megabytes (3mb)?
- ☐ Sent the referral to the Department (electronic and hard copy preferred)?

Geographic Information System (GIS) data supply guidelines

If the area is less than 5 hectares, provide the location as a point layer. If the area greater than 5 hectares, please provide as a polygon layer. If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer.

GIS data needs to be provided to the Department in the following manner:

- Point, Line or Polygon data types: ESRI file geodatabase feature class (preferred) or as an ESRI shapefile (.shp) zipped and attached with appropriate title
- Raster data types: Raw satellite imagery should be supplied in the vendor specific format.
- Projection as GDA94 coordinate system.

Processed products should be provided as follows:

- For data, uncompressed or lossless compressed formats is required - GeoTIFF or Imagine IMG is the first preference, then JPEG2000 lossless and other simple binary+header formats (ERS, ENVI or BIL).
- For natural/false/pseudo colour RGB imagery:
 - If the imagery is already mosaiced and is ready for display then lossy compression is suitable (JPEG2000 lossy/ECW/MrSID). Prefer 10% compression, up to 20% is acceptable.
 - If the imagery requires any sort of processing prior to display (i.e. mosaicing/colour balancing/etc) then an uncompressed or lossless compressed format is required.

Metadata or 'information about data' will be produced for all spatial data and will be compliant with ANZLIC Metadata Profile. (http://www.anzlic.org.au/policies_guidelines#guidelines).

The Department's preferred method is using ANZMet Lite, however the Department's Service Provider may use any compliant system to generate metadata.

All data will be provide under a Creative Commons license (<http://creativecommons.org/licenses/by/3.0/au/>)