

# **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);
  - $\circ$   $\,$  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 <u>Department's website</u>.

#### 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 <u>http://www.environment.gov.au/topics/about-us/legislation/environment-protection-and-biodiversity-conservation-act-1999</u>

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:** 

WTP Effluent Discharge Improvement Works (Multiple Outlets)

# **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.

The Western Treatment Plant (WTP) is a sewerage treatment plant which processes around half of Melbourne's sewage and produces almost 40 billion litres of recycled water a year.

It is a Ramsar listed site and attracts large numbers of shorebirds, including listed migratory species. The Effluent Discharge Improvement Works (multiple outlets) will re-distribute effluent, currently being discharged into Port Phillip Bay, onto the intertidal zone to benefit the intertidal invertebrates and improve the feeding habitat of the migratory shorebirds.

In 2002 Melbourne Water upgraded the sewage treatment process and significantly improved the quality of effluent in treatment lagoons and that discharged to Port Phillip Bay (the Environment Improvement Project (EIP)). The multiple outlets project was identified in the Strategic Compliance Plan (Melbourne Water 2014) to mitigate the impacts of reduced effluent flows into Port Phillip Bay from the EIP on the intertidal food supplies for shorebirds and associated declines in shorebird numbers.

Multiple outlets involves the installation of five new, small outlets between the 85W 'A' Lagoons and Beacon Point and a discharge pipe from Lake Borrie to the Murtcaim Drain. These new outlets will redistribute the effluent discharged from the Lake Borrie outlet onto the intertidal zone where it will improve the feeding habitat for migratory shorebirds.

	Latitude				Longitude		
Latitude and longitude	location point	degrees	minutes	seconds	degrees	minutes	seconds
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.							

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 <u>Attachment A</u>).

#### Do not use AMG coordinates.

The total multiple outlets project area is 0.53 ha (refer to section 1.4) so a single pair of latitude and longitude references are provided of each outlet.

Name	Туре	Longitude	Latitude
85 West Outlet	Outlet	-38.00211	144.60292
Lake Borrie Outlet	Outlet	-38.00712	144.58608
Beacon Point 1 Outlet	Outlet	-38.01563	144.57685
Beacon Point 2 Outlet	Outlet	-38.01695	144.57621
Beacon Point 3 Outlet	Outlet	-38.01853	144.57562
Drainage Connection	Outlet	-38.02689	144.56354
Site Compound / Crib Shed	Site Compound / Crib Shed	-38.01100	144.58131
Site Compound / Crib Shed	Site Compound / Crib Shed	-38.00205	144.60206

#### 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 WTP is situated on approximately 10,568 ha and is located along the western side of Port Phillip Bay, approximately 8 km southwest of Werribee. It treats approximately 55% of Melbourne's sewage and wastewater, and supplies recycled water (up to 40 GL per annum) to both on-site and off-site customers in Melbourne's west.

The WTP site is also a Ramsar site and home to various native flora and fauna and to international migratory birds. Melbourne Water has obligations under both State and Commonwealth legislation, principally the *Environment Protection Act 1970* and the *Environment Protection and Biodiversity Conservation Act 1999*, for management and operation of the WTP site.

.4	Name	Туре	Area (Ha)
Size of the development footprint or work area	85 West Outlet	Outlet	0.061266
(hectares)	Lake Borrie Outlet	Outlet	0.099975
	Beacon Point 1 Outlet	Outlet	0.077172
	Beacon Point 2 Outlet	Outlet	0.075607
	Beacon Point 3 Outlet	Outlet	0.063069
	Murtcaim Drain Connection	Outlet	0.097655
	Site Compound / Crib Shed	Compound	0.021644
	Site Compound / Crib Shed	Compound	0.039557
	TOTAL AREA		0.535945

#### 1.5

Street address of the site

Western Treatment Plant, Lot 1 New Farm Road, Werribee Vic 3030

### 1.6

**Lot description** Describe the lot numbers and title description, if known.

Name	Land Title	Lot Description	Landowner
85 West Outlet	10924/934 (TP857854)	FARM ROAD COCOROC 3030	Melbourne and Metropolitan Board of Works
	CA2 SEC20 Parish: Cocoroc	JETTY ROAD COCOROC 3030	Melbourne and Metropolitan Board of Works on behalf of DELWP
Site Compound / Crib Shed	10924/934 (TP857854)	FARM ROAD COCOROC 3030	Melbourne and Metropolitan Board of Works
Lake Borrie Outlet	12F Parish: Murtcaim	720 & 800 DANDOS	Parks Vic on behalf of DELWP
Beacon Point 1 Outlet		ROAD POINT WILSON 3212	
Beacon Point 2 Outlet	_		
Beacon Point 3 Outlet			
Murtcaim Drain Connetion	11397/956 (TP950860)	2000-2360 PRINCES HIGHWAY POINT WILSON 3212	Melbourne and Metropolitan Board of Works
	12F Parish: Murtcaim	720 & 800 DANDOS ROAD POINT WILSON 3212	Parks Vic on behalf of DELWP
Site Compound / Crib Shed	L12F Parish: Murtcaim	720 & 800 DANDOS ROAD POINT WILSON 3212	Parks Vic on behalf of DELWP

#### 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.

A permit under section 47 of the Planning and Environment Act will be required through the Wyndham City Council and City of Greater Geelong. The contacts for these council permits are:

Council	Contact	Details
Wyndham City Council	Roger Munn	03 9742 0777
City of Greater Geelong	Not yet assigned	03 5272 4456

#### 1.8

#### Time frame

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

Construction of the project will begin in May 2016 and be complete by the end of November 2016 at the latest. Based on the preliminary construction schedule, construction is anticipated to be completed as early as the end of August 2016. The multiple outlet has an operational life of 50 years.

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?	x	No
1.10	Alternative time frames etc Does the proposed action include alternative time frames, locations or activities?	x	No
1.11	<b>State assessment</b> Is the action subject to a state or territory environmental impact assessment?	X	No. Matters addressed in this EPBC Referral capture relevant Victorian State matters. Consultation with the Victorian Department of Environment, Land Water and Planning (DELWP) will be undertaken.
1.12	<b>Component of larger action</b> Is the proposed action a component of a larger action?	x	No Yes, you must also complete Section 2.7 The Project is part of first stage of a three stage upgrade to the WTP. The first stage includes the following projects: • WTP Treatment Capacity Augmentation Stage 1 (complete) • WTP 115E to Effluent Reuse Channel Transfer System (complete) • WTP multiple outlets project (the subject of this referral)
1.13	<b>Related actions/proposals</b> Is the proposed action related to other actions or proposals in the region (if known)?	x	No

1.14	Australian Government funding Has the person proposing to take the action received any Australian Government grant funding to undertake this project?	x	No
1.15	Great Barrier Reef Marine Park Is the proposed action inside the Great Barrier Reef Marine Park?	x	No

# 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.

Five new outlets will be located between 85W 'A' Lagoon and Beacon Point (Figure 2-6) and a transfer pipe will discharge flow from Lake Borrie to the Murtcaim Drain (Figure 7). The constructability report in Attachment E (Theiss, Black and Veach 2015) provides an example of how the outlets could be constructed, however this contract has yet to be tendered and therefore the construction methodology may be subject to change.

Laydown areas and crib facilities will be temporarily located at 85 W during the construction of the 85W outlet (north of Little River) and near the Lake Borrie outlet bridge area for construction of the other four outlets (south of Little River). An indicative location of the laydown areas are provided in Appendix B of Attachment E (Theiss, Black and Veach 2015). Additional laydown areas will also be available if required adjacent to the access road within the outlet sites construction footprint.

Construction works are planned to commence in May 2016 and may extend into November 2016 at the latest. This will avoid important feeding periods for migratory shorebirds between January and March. Based on a preliminary construction schedule (Attachment E Theiss, Black and Vetch 2015), it is anticipated that construction could be completed as early as the end of August 2016. Construction is planned to occur during daylight hours to eliminate the need for night lighting. It is expected that the pipes for the outlets will be trenched through the dunes from the road to the beach disturbing an area no greater than 10 meters wide which will be reinstated after the pipe is laid. The construction footprint for the outlets and the discharge pipe from Lake Borrie into Murtcaim drain are provided in Appendix D (Theiss, Black and Veach 2015). Vehicles accessing the outlet sites will use pre-existing roads and no additional maintenance is expected to be required.

A typical layout of an outlet is provided in Appendix B of Attachment E (Theiss, Black and Veach 2015). The discharge end of the outlet will be covered with rocks to diffuse the flow onto the intertidal area and minimise any erosion effects from the discharge flow.

The 250mm outlets will range in length from 18 to 37 metres. The outlets for 85 W and Lake Borrie will be capable of discharging flows between 1 ML/day and 3 ML/day. The discharge pipe from Lake Borrie into Murtcaim Drain will be capable of flows between 1ML/day and 10ML/day. The existing four licenced outlets – 15 East, 145 West, Lake Borrie and Murtcaim outfalls will continue to discharge the remaining outlet flow.

#### Operation

The design life of the multiple outlets is 50 years, and have the ability to be operated remotely. Routine maintenance will include annual calibration of the flow meters to maintain accuracy and a jet clean out once every two years. There will be no requirement for permanent access tracks through foreshore vegetation adjacent to the outlets.

#### 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 multiple outlets project was identified in the Strategic Compliance Plan (Melbourne Water 2014) to mitigate the impacts of reduced intertidal food supplies for shorebirds and associated declines in shorebird numbers from reduced effluent flows into Port Phillip Bay. The new outlets are expected to assist with restoring the intertidal system's ability to support the shorebird numbers, for which it was historically known (Ecology Australia 2015b).

#### 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.

No alternative locations are proposed. The location of the multiple outlets and the intertidal zone between 145W outlet and Beacon Point is one of the most important areas for shorebirds at the WTP (Ecology Australia 2015b). Activities are planned from May 2016 to November 2016 at the latest to avoid the peak period for most migrating shorebirds at the WTP. Therefore no alternative timeframes are 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.

#### **Commonwealth Legislation**

# Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

It is anticipated that the multiple outlets project will be determined 'not a controlled action' and therefore, will not require approval under the EPBC Act for reasons set out in this Referral. This outcome is expected based on the impact assessment completed for this referral (Ecology Australia 2105a, b) which found that multiple outlets project will provide a net benefit to migratory shorebirds and will not have a significant impact on any Matters of National Significance.

#### Victorian State Legislation

#### Environment Effects Act 1978 (EE Act)

An assessment against the Environmental Effects Statement (EES) Referral criteria under the EE Act was undertaken and it was determined that an EES Referral would not be required for the project. Relevant matters listed under State legislation have been captured and assessed in this EPBC Referral and environmental risk assessment.

Consultation with the Victorian Department of Environment, Land, Water and Planning (DELWP) will be undertaken to discuss the Project, potential impacts and proposed mitigation measures.

#### Flora Fauna Guarantee Act 1988 (FFG Act)

Potential impacts to species listed under the FFG Act have been assessed in an environmental risk assessment. The project does not require a permit under this Act.

Aboriginal Heritage Act 2006 (AH Act)

Melbourne Water completed an internal cultural heritage due diligence assessment through the Melbourne Water Heritage Team to ensure cultural heritage has been considered appropriately under the AH Act for the Project. The proposed multiple outlets project construction works will be within both previously disturbed footprint (treatment lagoons and roads) and undisturbed areas on the foreshore. The works within previously undisturbed areas have the potential to cause harm to unknown Aboriginal cultural sites and places. Benchmark Heritage Management were engaged to act as the multiple outlets projects cultural heritage advisor and have liaised with the Wathaurung Aboriginal Corporation (WAC), a Registered Aboriginal Party (RAP). A Cultural Heritage Management Plan (CHMP Number 13783) was approved by the Wathaurung Aboriginal Corporation (WAC) on 2 December 2015.

# Planning and Environmental Act 1987 (PE Act)

The project works are subject to an assessment against the provisions of the Wyndham Planning Scheme and the Greater Geelong Planning Scheme in accordance with Section 47 of the *Planning and Environment Act 1987.* In planning terms the project involves the construction and carrying out of buildings and works and the removal and lopping of native vegetation. The project does not involve the change to the existing utility land use.

Pursuant to Particular Provision for Native Vegetation, clause 52.17 of both the Wyndham Planning Scheme and the Greater Geelong Planning Scheme a permit will be required to remove or lop native vegetation. In line with State government clearing regulations from *Permitted Clearing of Native Vegetation – Biodiversity Assessment Guidelines (2013).* The clearing of native vegetation from the current proposal followed a low risk pathway as all clearing is in 'location A' and the total extent is <1 ha (Appendix 4). The offset requirement within each municipality is set out in Table 1.

	City of Greater Geelong	Wyndam City Council
Total estimated vegetation removal	0.068 ha	0.028 ha
Offset type	General offset	General offset
Offset amount (general biodiversity equivalence units)	0.02	0.002
Offset attributes		
Vicinity	Catchment Management Authority	Catchment Management Authority
Minimum strategic biodiversity score	0.080	0.080
Strategic biodiversity score of marked native vegetation	0.100	0.100

#### Table 1 Offset requirement for each municipality

Pursuant to Public Use Zone, clause 36.01 of both the Wyndham Planning Scheme and the Greater Geelong Planning Scheme a planning permit is not required to construct or carry out works.

Pursuant to the Public Conservation and Recreation Zone, clause 36.03 of the Greater Geelong Planning Scheme a permit will be required to construct or carry out works. A planning application must be accompanied by the written consent of the designated public land manager, being Parks Victoria.

An Environmental Significance Overlay and a Land Subject to Inundation Overlay apply to the project works areas located within the City of Greater Geelong. Pursuant to the Environmental Significance Overlay, clause 42.01 of the Greater Geelong Planning Scheme, a planning permit is not required to construct or carry out works approved under the *Coastal Management Act 1995*.

Pursuant to the Land Subject to Inundation Overlay, clause 44.04 of the Greater Geelong Planning Scheme, a planning permit is not required to undertake works involving the laying of underground sewerage if the works do not alter the topography of the land.

No overlays apply to the project works areas located within the City of Wyndham.

### Coastal Management Act 1995 (CM Act)

Coastal Management Act consent is required to use and develop coastal Crown land by any party, including committees of management and municipal councils. Coastal Crown land is generally defined as all Crown land within 200 metres of the high tide mark and the seabed of Victorian coastal waters. The five proposed outlets will be constructed on coastal crown land (and portion of the drainage line connection between Lake Borrie and Murtcaim Drain) and therefore an application for consent under the CM Act has been lodged with the planning permits for the Wyndham City Council and City of Greater Geelong.

### Environmental Protection Act 1970 (EP Act)

Under the Environment Protection Act (the EPA), works approvals are required for industrial and waste management activities that have the potential for significant environmental impact, including the discharge of waste to the environment.

Under the EPA the WTP is a recognised Accredited Licence Holder and therefore the WTP is exempt from the requirement for a works approval, unless the works are significant. Melbourne Water submitted an application on 29 September 2015 for an exemption from a works approval on the basis that the works are not significant and will not cause an increase in the discharge of treated effluent to the environment. The Multiple Outlets Project received exemption from the EPA on 2 December 2015.

#### 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).

It is not anticipated that the proposed action will be subject to a state environmental impact statement.

#### 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.

# **Occupiers**

The Project is located within Melbourne Water's WTP and on coastal crown land managed by Parks Victoria (south of Little River) and Melbourne Water (north of Little River).

# **Registered Aboriginal Party**

Consultation with the Wathaurung Aboriginal Corporation (WAC) Registered Aboriginal Party (RAP) has previously been undertaken for this project by Benchmark Heritage Management. The Wathaurung Aboriginal Corporation (WAC) visited the site in October 2015. A Cultural Heritage Management Plan was approved on 2 December 2015 (CHMP Number 13783).

# Stakeholders

Melbourne Water continues to engage and consult persons and stakeholders with an interest in the WTP and its operation. Key stakeholders that have or will been consulted in relation to the Project are included in Table 2.

#### Table 2 - Identified Project Stakeholders

Stakeholder Group	Details		
Commonwealth Regulatory Stakeholders	<ul> <li>Department of Environment (DoE)</li> </ul>		
Victorian State Regulatory or Government Stakeholders	<ul> <li>Department of Environment, Land, Water and Planning (DELWP)</li> </ul>		
	Environment Protection Authority (EPA)		

Stakeholder Group	Details
	<ul> <li>Office of Aboriginal Affairs Victoria (OAAV)</li> </ul>
Local Government Area Authorities	Wyndham City Council
	City of Greater Geelong
Advisory Committees	The WTP Biodiversity Conservation and Advisory Committee     (BCAC)
Other Stakeholders	<ul><li>Parks Victoria</li><li>Wathaurung Aboriginal Corporation (WAC)</li></ul>

Melbourne has not received any negative feedback on the multiple outlet project, and any feedback has been positive and supportive of the approach.

#### 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).

In 2002 Melbourne Water commissioned the Environment Improvement Project (EIP) which involved significant changes and upgrades to the sewage treatment process at the WTP. The sewage treatment upgrades implemented under the EIP resulted in significant improvements to the quality of effluent in treatment lagoons, and the effluent discharged to Port Phillip Bay, primarily through a reduction in nitrogen and suspended solids. While this has provided general benefits to Port Phillip Bay, the higher quality effluent has resulted in declines in the habitat values and avifauna of some treatment lagoons, particularly Lake Borrie, and the Werribee intertidal mudflats due to the reduction in nitrogen.

In response, Melbourne Water developed a plan to mitigate impacts arising from the EIP on biodiversity values, whilst still meeting the obligations within the Environmental Protection Authority (EPA) accredited discharge license, through a three stage upgrade to the WTP. The Project is part of first stage of a three stage upgrade to the WTP. The first stage includes the following projects:

- WTP Treatment Capacity Augmentation Stage 1 (complete)
- WTP 115E to Effluent Reuse Channel Transfer System (complete)
- WTP multiple outlets project (the subject of this referral)

Stage 1 Treatment Capacity Augmentation (Lake Borrie pipeline) was completed in 2015 (Referral 2014/7313).

The WTP multiple outlets project (subject of this referral) involves the installation of five new, smaller outlets between 85W 'A' Lagoon and Beacon Point and an outflow pipe from Lake Borrie to the Murtcaim drain. This will re-distribute the effluent discharged from the Lake Borrie outlet onto the intertidal zone. These works, together with the higher nutrient effluent from Lake Borrie, are expected to help restore the intertidal system's ability to support the shorebird numbers by applying nutrients directly to the intertidal zone, where it can benefit intertidal invertebrates.

Stage 2 Augmentation Project involves the installation of a new activated sludge plant adjacent to the existing activated sludge plant in the 55E lagoon. This stage was subject to an EPBC Referral and considered "not a controlled action" (Referral 2015/7515).

Stage 3 Augmentation will be the upgrade of the existing 55E activated sludge plant which will maintain level of service, improve safety of operation and treatment performance reliability and reduce whole asset life cost. This project is planned to occur around 2018-2020.

Due to the timeframes for each stage of the WTP upgrades and the different locations within the WTP site, WTP the multiple outlets project (the subject of this Referral) is considered wholly its own action.

# **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

Not applicable

Nature and extent of likely impact

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

#### 3.1 (b) National Heritage Places

#### Description

Not applicable

#### Nature and extent of likely impact

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

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

#### Description

Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar wetland supports a variety of wetland types ranging from shallow marine waters to seasonal freshwater swamps and extensive sewage ponds.

This Ramsar site is the sixth most important area in Australia for migratory waders and the most important in Victoria. The Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site meets four of the nine criteria:

**Criterion 1**: Port Phillip Bay (Western Shoreline) and Bellarine Peninsula includes a range of marine and inland wetlands characteristic of the South East Coastal Plain bioregion as well as artificial wetlands. Within the Ramsar site there are good examples of saltmarshes, estuarine wetlands and a shallow marine embayment and nearshore areas. A major unique feature of the site is the Mud Islands, which are sand islands that have been formed through the interactions of bird guano and marine waters to anchor the islands in the shifting sands.

*Criterion 3:* The Ramsar site is one of the most important sites in Victoria for migratory shorebirds and the Avalon-Werribee Wetlands regularly support tens of thousands of Straw-necked Ibis. Additionally, 137 native plants and 135 bird species have been recorded in Lake Connewarre State Game Reserve.

*Criterion 5*: Wetlands in the Ramsar site regularly support more than 20,000 waterbirds, including large numbers of migratory waders, thousands of Black Swans, ducks, ibis and cormorants. In particular, Lake Connewarre, Reedy Lake and the Water Treatment Plant support significant numbers of waterbirds during the summer months.

*Criterion 6*: Port Phillip Bay (Western Shoreline) and Bellarine Peninsula regularly supports more than 1% of the known Australian population of fourteen species: Pied Oystercatcher; Grey, Lesser Golden, Mongolian and Double-banded Plovers; Banded Stilt; Red-necked Avocet; Ruddy Turnstone; Eastern Curlew; Greenshank; Marsh, Sharp-tailed and Curlew Sandpipers, and Red-necked Stint.

The Biodiversity Conservation and Ramsar Management Plan for the Western Treatment Plant (DSE 2003) details the components of the Ramsar Wetland within the WTP. As the land manager, Melbourne Water has obligations under both State and Commonwealth legislation for the management and operation of the WTP site and the Ramsar Wetland.

#### Nature and extent of likely impact

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

Construction works from the multiple outlets project will be short term and localised and will not occur during important feeding periods for migratory shorebirds between January and April. The construction works will not impact any saltmarsh, estuarine wetlands and shallow embayments and the impact on the nearshore environment will be localised and short term. Therefore there is a low risk that the construction works will impact the Ramsar wetland and migratory species.

Construction vehicles will be clean of vegetative material before entering the WTP. Therefore the risk of an introduction of invasive species to Ramsar Wetland from construction activities is low.

The outlet structures and effluent flow on the intertidal zone are not predicted to negatively impact the foreshore habitat. Rather, the nutrients will be redistributed on the intertidal zone instead of the nearshore environment to provide an overall net benefit to the character of the wetland and to benefit shorebirds by restoring the capacity of the foreshore to support the communities of benthic fauna which are known to sustain shorebird populations (Ecology Australia 2015b).

#### **3.1 (d)** Listed threatened species and ecological communities

#### Description

A search of the Australian Government Department of Environment's EPBC Act Protected Matters Search Tool was carried out for the site, with a 5 kilometre radius of the construction footprints on 4 November 2015 (Department of Environment, 2015). The report returned information listed in Table 3. The full search results are provided in the Environmental Report (Attachment B).

#### Table 3 Protected matters search results

Protected matters Identification	Number of Protected species within 5km radius of construction footprints
World Heritage Properties	None
National Heritage Properties	None
Wetlands of International Importance	1
Great Barrier Reef Marine Park	None
Commonwealth Marine Areas	None
Listed Threatened Ecological Communities	6
Listed Threatened Species	46
Listed Migratory Species	66

No threatened ecological communities occur within or adjoining the proposed construction footprints (Ecology Australia 2015a). No threatened plant species listed under the EPBC Act were recorded or are considered likely to occur within the proposed construction footprints or adjoining vegetation (Ecology Australia 2015a). Four threatened fauna species the Orange Bellied Parrot (*Neophema chrysogaster*) (listed as Critically Endangered), Fairy Tern (*Sternula nereis nereis*) (listed as Vulnerable), Australasian Bittern (*Botaurus poiciloptilus*) and Growling Grass Frog (*Litoria raniformis*) have been recorded or are known to occur in areas adjacent to the proposed construction footprints.

### Orange Bellied Parrot (Neophema chrysogaster)

The Orange-bellied Parrot (*Neophema chrysogaster*) is listed as Critically Endangered under the EPBC Act, threatened under the FFG Act, and classified as Critically Endangered in Victoria by DELWP (2013). The Orangebellied Parrot is a winter migrant to mainland Australia, arriving in autumn, from its breeding grounds in Tasmania. Saltmarsh habitats at the WTP form one of the three most important sites for the Orange-bellied Parrot in Victoria. Five birds were regularly observed in 2013 at 55E Lagoon and in 2014, one at The Spit Nature Conservation Reserve (NCR) and four regularly at 55E Lagoon (Melbourne Water 2014). Areas used most recently by small number of parrots (four birds) include The Spit NCR, 270S Borrow Pits and the access tracks of 55E and 115E Lagoons. The Orange-bellied Parrot has not been recorded recently on the foreshore vegetation adjacent to Lake Borrie or the proposed 85 West outlet footprint. (W.Steele pers. comm.).

#### Fairy Tern (Sternula nereis nereis)

The Fairy Tern (*Sternula nereis nereis*) is listed as Vulnerable under the EPBC Act, threatened under the FFG Act and classified as Endangered by DELWP (2013). Fairy Terns are piscivorous birds that mainly occupy sheltered coasts of mainland and inshore and offshore islands, including harbours, inlets, bays, estuaries, lagoons and ocean beaches (Ecology Australia 2015b). They usually forage in shallow water of sheltered coasts, embayments and estuaries and close inshore and often along shoreline (Ecology Australia 2015b). Fairy Terns formerly bred at The Spit Nature Conservation Reserve, and are still known to forage along the foreshore around Lake Borrie.

#### Australasian Bittern (Botaurus poiciloptilus)

The Australasian Bittern (*Botaurus poiciloptilus*) is listed as Endangered under the EPBC Act, threatened under the FFG Act, and classified as Endangered in Victoria by DELWP. Australasian Bittern is a cryptic waterbird that inhabits densely vegetated waterways and wetlands. It has been recorded at Walsh's Lagoon at the WTP. It has been observed at Little River upstream of the multiple outlets project site adjacent to Lake Borrie (W.Steele pers. comm.) but has not been sighted in the proposed construction footprints.

#### Growling Grass Frog (Litoria raniformis)

The Growling Grass Frog (*Litoria raniformis*) is listed as Vulnerable under the EPBC Act, threatened under the FFG Act, and classified as Endangered in Victoria by DELWP. The WTP has consistently supported a large population of Growling Grass Frogs for many years, with active monitoring and management of this population beginning over the spring and summer of 2001/02. Importantly, the WTP is of national conservation significance for the Growling Grass Frog and is considered to support an 'important population' of the species, as defined under the EPBC Act. The wide variety of wetland and terrestrial habitat types available at the WTP makes it capable of

supporting a persistent breeding population of the Growling Grass Frog. Growling Grass Frog habitat has been identified adjacent to the Murtcaim drain connection lay down area. The Growling Grass Frog has not been recorded at the proposed construction footprints but has been observed at least once nearby in the Murtcaim drain 100m north of the Murtcaim drain connection footprint (W.Steele pers. comm.).

#### Nature and extent of likely impact

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

Construction activities may disturb the Orange Bellied Parrot and cause a temporary loss of foraging habitat and saltmarsh food plants. However, the Orange Bellied Parrot has not been recently recorded within the proposed construction area, it is unlikely that these works will have a significant impact on the Orange Bellied Parrot population (Ecology Australia 2015b).

It is unlikely that the construction works will have any impact on the Fairy Tern and Australian Bittern based on the extent of foraging habitat available in the broader area along the coastline of Port Phillip Bay and on the localised and confined area of construction of each outlet. Preclearance checks of avifauna will be undertaken before any vegetation clearance to ensure no birds are present in the vegetation.

Growling Grass Frogs have previously been recorded in a Coastal Lagoon near 85 West Outlet (near 85W-A-Pond 8); Lake Borrie North Pond 8; Lake Borrie South Ponds 28 and 29; and in the drain along Beach Road and adjacent to the construction footprint of Murtcaim Feed.

The area of habitat in any of the treatment ponds impacted by the works associated with construction of the outlets is very small in context of the habitat available across the WTP. Therefore, a temporary loss of a very small area of habitat is considered to have a very low impact to the population of Growling Grass Frogs at the Plant. Nevertheless, a thorough search of each construction zone will be undertaken prior to construction works commencing in order to make certain that construction works are unlikely to impact individuals. Appropriate construction protocols, such as use of sediment fences, will be employed to ensure that the habitat in the Beach Road drain is not impacted, pre-, during and post-construction. These protocols will be addressed in an Environmental Management Plan.

#### 3.1 (e) Listed migratory species

#### Description

The WTP supports 41 species of shorebird, the most abundant of which are small, migratory shorebirds including, Red-necked Stints (*Calidiris ruficollis*), Sharp-tailed Sandpipers (*Calidris acuminata*) and Curlew Sandpipers (*Calidiris ferruginea*). The WTP regularly supports more than 20,000 shorebirds, and 1% of the population of eight species (Ecology Australia 2015b). The intertidal zone between 145W outlet and Beacon Point is one of the most important areas for shorebirds at the WTP (Steele 1996). Following the implementation of the Environment Improvement Project, the intertidal area around 145W outlet, is now most commonly used by shorebirds (Ecology Australia 2015b).

The distribution and abundance of migratory shorebirds across the broader area appears to be partly related to benthos abundance and partly to tidal flat width, where broader tidal flats provide more area for foraging (DSE 2007). Shorebirds can only forage at low tide on exposed mudflats and the time that intertidal foraging sites of the WTP are exposed at low tide also influences the abundance of shorebirds across sites (DSE 2013a).

Most migratory shorebirds occur at the WTP from August to April, with the first arrivals from their breeding grounds in the Northern Hemisphere occurring in August. Numbers then rise rapidly until September and gradually increase over October to mid-December, before rising rapidly again between January and March (Ecology Australia 2015b). The period from January to April, when shorebirds are building-up fat reserves and preparing to migrate to the northern hemisphere, is one of the most important periods. The exception to this pattern of occurrence at the WTP are Double-banded Plovers (*Charadrius bicinctus*), which spend the winter foraging on mudflats and estuaries in eastern Australia, usually arriving in March or April.

#### Nature and extent of likely impact

Address any impacts on the members of any listed migratory species, or their habitat.

There will be no impact to migratory shorebird species if the construction works are undertaken from May to September, when migratory shorebird species are in the Northern Hemisphere (Ecology Australia 2015b).

Melbourne Water plans construction works to commence in early-May and be completed by late-August. In order to have construction works completed by late-August, Melbourne Water may construct more than one outlet at a time, rather than sequencing outlet construction. If it is not possible to complete outlet construction prior to the end of August, Melbourne Water will aim to have all civil works completed by the end of August. If it is not possible to complete all civil works prior to the end of August, Melbourne Water will aim to have all civil works completed by the end of August. If it is not possible to complete all civil works prior to the end of August, Melbourne Water will aim to have all sheet-piling works and most pipe-laying works completed by the end of August.

If construction extends past September and into November there is potential for some disturbance impact to migratory shorebirds. The following mitigation measures will be followed to ensure the impact to migratory shorebirds over this period remains low:

- Minimise construction traffic at the outlets
- Limit civil works at the outlets to one sheet-piling crew or one pipe-laying crew at a time;
- Limit mechanical or electrical works to one outlet at a time
- Construct the outlets within the main shorebird foraging areas first, and preferably prior to September (commence construction works at the Beacon Point Outlets, move to 85W Outlet and then to the Murtcaim drain connection).

These mitigation controls will be addressed in an Environmental Management Plan.

The overall duration of construction is relatively short for what is anticipated to be a long term benefit by restoring the intertidal system's ability to support shorebird numbers.

#### 3.1 (f) Commonwealth marine area

(If the action is <u>in</u> 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

Not applicable

#### Nature and extent of likely impact

Address any impacts on any part of the environment in the Commonwealth marine area.

#### 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.

#### Not applicable

#### 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.

#### 3.1 (h) The Great Barrier Reef Marine Park

#### Description

Not Applicable

#### Nature and extent of likely impact

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

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.

#### Not Applicable

#### 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.

# 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)		Х	No
	Is the proposed action a nuclear action?		

#### 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?	Х	No

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

3.2 (c)	Is the proposed action to be taken in a	Х	No
	Commonwealth marine area?		

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?	Х	No

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		No
	Great Barrier Reef Marine Park?		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

#### Vegetation Communities

The multiple outlets will be partly located on the foreshore reserve and fringing treatment lagoons which supports remnant indigenous vegetation of several Ecological Vegetation Classes (EVCs). EVCs occurring within the proposed construction footprint are:

- Berm Grassy Shrubland (EVC 311) where Coast Saltbush (*Atriplex cinerea*) dominates the berm of shell grit deposited by wave action on the immediate foreshore;
- Plains Brackish Sedge Wetland (EVC 891) occurring in wetter depressions behind the berm where fresh/brackish water seepage from the pond system has reduced salinity, allowing Salt Club-sedge (*Bolboschoenus caldwellii*) to outcompete Coastal Saltmarsh vegetation. This also occurs as fringing vegetation in sections of treatment lagoons (Ecology Australia 2015a).

# **Plant Species**

# Rare or threatened plant species and ecological communities

No plant species listed under the Victorian *Flora and Fauna Guarantee Act 1988* or the EPBC Act were recorded or are considered likely to occur within the proposed construction footprints or adjoining vegetation.

One species classified as rare by DEPI (DEPI 2014a) was recorded in 2013: Marsh Saltbush (*Atriplex paludosa* subsp. *paludosa*). This species was scattered in the Coastal Saltmarsh just inland of the Berm Grassy Shrubland vegetation, between Little River and the 145W outlet. It was not recorded within (or immediately adjoining) construction footprints as part of the current assessment. Several other rare or poorly known species (as listed by DEPI 2014a) have the potential to occur within the broader study area (Salt Lawrencia, *Lawrencia spicata*) though were not recorded within the proposed construction footprints.

### 3.3 (b) Hydrology, including water flows

The wider WTP area comprises sewage treatment lagoons, adjoining coastal areas, natural wetlands, and waterways. Little River which runs between two outlet locations and provides habitat for aquatic flora and fauna. The project will not impact Little River. Lake Borrie, located southwest of the Project, is an important site for waterfowl, and remains an important drought-refuge for waterfowl. The multiple outlets project may cause a short term localised impact on the adjacent shoreline of Lake Borrie during construction.

# 3.3 (c) Soil and Vegetation characteristics

The WTP supports a range of vegetation features including areas of low quality remnant native vegetation, exotic plants and weeds, planted shelter belts, and filtration drain vegetation. A description of the vegetation characteristics is provided in 3.3 (a).

# 3.3 (d) Outstanding natural features

There are no World or National Heritage places (as defined in the Matters of National Environmental Significance Guidelines 2013) nearby to the Project area, therefore the Project will not have a significant impact on any outstanding natural features.

# 3.3 (e) Remnant native vegetation

Section 3.3 (a) describes the remnant vegetation at the project site.

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

Not applicable

#### 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.

Land within the WTP has been highly modified with the construction of drains and sewage treatment lagoons. Much of the native vegetation in these areas has been cleared, while some of the vegetation has been planted, or opportunistically colonised.

Four noxious weed species listed under the Catchment and Land Protection Act 1994 were recorded in the 2013 study area (Ecology Australia 2015a). Of these, three are listed as Regionally Controlled and two are listed as Restricted in the Port Phillip and Western Port Catchment Management Authority region. Best-practice hygiene protocols will be followed to reduce the risk of weed species and pathogens being introduced to the site or moved around within the sites. All vehicles and equipment entering the site will be 'clean', and noxious weed species present on-site will not be spread as a result of these works.

Melbourne Water is continuing to manage coastal erosion for the entire WTP and the use of rock beaching at the outlet will also be used to minimise potential outflow erosion issues.

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

Not applicable

#### 3.3 (i) Indigenous heritage values

Melbourne Water completed a cultural heritage desktop assessment for the multiple outlets project construction works and determined:

- There are no Victorian Aboriginal Heritage Register (VAHR) sites within, or in close proximity to the proposed works sites.
- There are no Victorian Heritage Register, Heritage Inventory or Heritage Overlay sites within, or in close proximity to the proposed works sites. There is one VAHR site about 1km upstream of the outlet of Little River in the bay. This place is described as a campsite.
- Other high density sites in the region also demonstrate the continuing long-term presence of Aboriginal people in this area.

The proposed multiple outlets project construction works will be within both previously disturbed footprint, being the treatment lagoons, roads and undisturbed areas on the foreshore.

The works within previously undisturbed areas have the potential to cause harm to unknown Aboriginal cultural sites and places. Melbourne Water has an approved cultural heritage management plan (CHMP Number 13783) to appropriately assess and manage this risk.

#### 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).

Fauna habitats within the WTP area have either been heavily degraded or constructed. Nevertheless, created habitats such as the filtration drains, treatment lagoons and planted shelterbelts are recognised as supporting habitats for a range of fauna species.

# **Treatment Lagoons**

The sewage treatment lagoons provide important foraging habitat for waterfowl (i.e. ducks, swans, coots, grebes and geese), and a drought refuge for waterbird species which typically breed on ephemeral inland swamps.

# The Spit Nature Conservation Reserve

The Spit Nature Conservation Reserve is a 300 ha nature reserve on the north-western shore of Port Phillip Bay, Victoria, Australia. The Spit Nature Conservation Reserve is approximately 2.5 km to the south of the closest proposed outlet. The Spit Nature Conservation Reserve consists of public land set aside to conserve and protect species, communities, and habitats of indigenous plants and animals. It is adjacent to the WTP and is managed by Parks Victoria.

The reserve contains a lagoon, sand spits and an area of saltmarsh. The north and south spits are approximately four kilometres long and vary in shape and size depending on the tide and, over longer periods of time, the onshore currents. At high tide, the depth of the lagoon reaches about one metre, while at low tide mudflats are exposed. This environment is an important feeding ground for a variety of birds, especially waders and waterbirds including the critically endangered orange-bellied parrot.

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

Outlets and the outflow pipe are located on freehold and Crown Land. Table 4 outlines the land tenure for each outlet.

# OutletLand tenureLegal State85 West OutletPort Phillip Bay CoastalCrown Land (

Outlet	Land tenure	Legal Status	Land Manager
85 West Outlet	Port Phillip Bay Coastal	Crown Land (Reserves) Act	Melbourne Water
	Reserve	1978	
	Freehold	Private land	Melbourne Water
Lake Borrie Outlet	Port Phillip Bay Coastal	Crown Land (Reserves) Act	Parks Victoria manage on
	Reserve	1978	behalf of DELWP
Beacon Point 1 Outlet	Port Phillip Bay Coastal	Crown Land (Reserves) Act	Parks Victoria manage on
	Reserve	1978	behalf of DELWP
Beacon Point 2 Outlet	Port Phillip Bay Coastal	Crown Land (Reserves) Act	Parks Victoria manage on
	Reserve	1978	behalf of DELWP
Beacon Point 3 Outlet	Port Phillip Bay Coastal	Crown Land (Reserves) Act	Parks Victoria manage on
	Reserve	1978	behalf of DELWP
Murtcaim Drain Connection	Port Phillip Bay Coastal	Crown Land (Reserves) Act	Parks Victoria manage on
	Reserve	1978	behalf of DELWP
	Freehold	Private land	Melbourne Water

#### 3.3 (I) Existing land/marine uses of area

Table 4 Land tenure for each outlet location

The existing land uses of the proposed work areas consist of sewage treatment facilities which has resulted in significant alteration to the original landform. The Project works will be located along three existing private Melbourne Water access roads which will provide access to 85W 'A' lagoon and Lake Borrie.

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

Not applicable

- - -

# **4 Environmental outcomes**

Provide descriptions of the proposed environmental outcomes that will be achieved for matters of national environmental significance as a result of the proposed action. Include details of the baseline data upon which the outcomes are based, and the confidence about the likely achievement of the proposed outcomes. Where outcomes cannot be identified or committed to, provide explanatory details including any commitments to identify outcomes through an assessment process.

If a proposed action is determined to be a controlled action, the Department may request further details to enable application of the draft *Outcomes-based Conditions Policy 2015* and *Outcomes-based Conditions Guidance 2015* (http://www.environment.gov.au/epbc/consultation/policy-guidance-outcomes-based-conditions), including about environmental outcomes to be achieved, 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.

General commitments to achieving environmental outcomes, particularly relating to beneficial impacts of the proposed action, 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, and conditions of approval, if your proposal proceeds to these stages).

Melbourne Water's Strategic Compliance Plan (Melbourne Water 2003) sets the goals to research, monitor and manage the impacts for the EIP on the listed matters of national environmental significance. The multiple outlets project was identified in the strategic plan to improve the productivity of the intertidal areas which had been impacted by the reduced flows from the Murtcaim and Lake Borrie outfalls into Port Phillip Bay (Melbourne Water 2003).

The multiple outlet project is expected to help restore the intertidal system's ability to support shorebird numbers, by applying nutrients directly to the intertidal zone, where it can benefit intertidal invertebrates.

The following survey programs for birds and listed threatened species are undertaken by Melbourne Water which will be relevant to the multiple outlets project:

- Annual surveys of the Growling Grass Frog (*Litoria raniformis*) during the breeding season (October to April)
- Annual waterfowl population counts until 2018 with a focus on species that occur in areas predicted to be affected by the EIP.
- Shorebird monitoring across WTP and adjacent intertidal mudflats, including monitoring of the Whiskered Tern (*Chlidonias hydrida*)

The monitoring, reporting and auditing obligations for MNES and the Ramsar Wetland will continue to be met during the construction and operation of the Project.

# **5** 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 (eg 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.

More general commitments (eg preparation of management plans or monitoring) 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 impact assessments undertaken by a qualified botanist and zoologist found that the construction and operation of the multiple outlets project will not have a significant impact on the three MNES at the proposed outlets. Rather the multiple outlets project will help restore the intertidal system's ability to support the shorebird numbers by applying nutrients directly to the intertidal zone. This will benefit the intertidal benthic fauna and improve the feeding habitat for migratory shorebirds.

# Ramsar Wetland

As indicated above the multiple outlets project will have no significant impact on the Ramsar wetland. Nevertheless construction vehicle wash down practices are proposed to ensure all vehicles are clean of vegetative material before entering the WTP.

# **Migratory shorebirds**

The multiple outlets project will not have a significant impact on listed migratory shorebirds and construction will avoid the important feeding period for migratory shorebirds from January to April (Ecology Australia 2015a). Construction is planned from May to late August, when migratory shorebird species are in the Northern Hemisphere (Ecology Australia 2015b). If construction extends from September until the end of November the following mitigation measures will be implemented to ensure the impact to migratory shorebirds remains low and will not have a significant impact:

- Minimise construction traffic at the outlets
- Limit civil works at the outlets to one sheet-piling crew or one pipe-laying crew at a time;
- Limit mechanical or electrical works to one outlet at a time
- Construct the outlets within the main shorebird foraging areas first, and preferably prior to September (commence construction works at the Beacon Point Outlets, move to 85W Outlet and then to the Murtcaim Feeder).

These mitigation controls will be addressed in an Environmental Management Plan.

# Orange-Bellied Parrot (*Neophema chrysogaster*) Fairy Tern (*Sternula nereis nereis*) Australasian Bittern (*Botaurus poiciloptilus*)

The multiple outlets project will not have a significant impact on the Orange-Bellied Parrot, Fairy Tern or Australasian Bittern. Nevertheless, preclearance checks of each construction footprint before vegetation clearing commences will be an additional environment management practice to ensure no birds are present.

# Growling Grass Frog (*Litoria raniformis*)

The multiple outlets project will not have a significant impact on the Growling Grass Frog, however the construction footprint at the Murtcaim drain connection is adjacent to Growling Grass Frog habitat. Appropriate construction protocols (e.g. use of sediment fencing) will be employed to ensure that this habitat is not impacted pre, during or post-construction.

# 6 Conclusion on the likelihood of significant impacts

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

# 6.1 Do you THINK your proposed action is a controlled action?



No, complete section 5.2

Yes, complete section 5.3

# 6.2 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.

The proposed locations and construction timing of multiple outlets project have been designed to minimise impacts to the values or attributes of the 'matters of national environmental significance' protected by Chapter 2, Part 3 of the EPBC Act. Impact assessments completed for this referral by qualified botanists and zoologists (Ecology Australia 2105a, b) found that multiple outlets project will not have a significant impact on any Matters of National Significance and will provide a net benefit to character of the Ramsar wetland and to migratory shorebirds.

More specifically, supporting reports and the analysis presented in this referral indicates:

- The multiple outlets will provide an overall net benefit intertidal system and the feeding habitat of the migratory shorebirds.
- Construction activities will not have a significant impact on the values of the Ramsar wetland and the multiple outlets will provide a net benefit to character of the Ramsar wetland.
- No listed threatened communities or flora species will be affected.
- The Fairy Tern, Australasian Bittern and Orange Bellied Parrot are unlikely to occur in the construction footprint and will not be affected by the project.
- Construction activities will not have a significant impact on migratory shorebirds.
- Construction activities near the Murtcaim drain connection will not have a significant impact on the Growling Grass Frog.

# 6.3 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

World Heritage values (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)
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.

**7 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. 1

	Yes	
Does the party taking the action have a satisfactory record of responsible environmental management?	х	
Provide details		
Melbourne Water has operated the WTP for over 100 years and successfully managed the Ramsar and other national important values.		
Melbourne Water has established an Environmental Policy and reports its performance annually through a Sustainability Report published on its website.		
The WTP has been an EPA Victoria accredited discharge licence holder since 2000. This requires a high level of environmental performance to retain this status. This licence was last amended on 31 May 2013.		
In line with Ramsar guidelines the site management plan addresses the ecological character of the site and is revised at approximately seven year intervals (MMBW 1989; Ecology Australia 1999, 2010; Brett Lane & Associates 2002).		
Melbourne Water provides ongoing monitoring and reporting of listed species and water quality to the Department of Environment under audit requirements.		
Annual compliance reports include Melbourne Water 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014.		
Five yearly independent audits of our compliance include reports by Mathews (2008), GHD (2013a, 2013b) and KBR (2013a, 2013b), all of which have been submitted to the Department.		

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? If yes, provide details In 2000/01 Melbourne Water received two Penalty Infringement Notices for litter and odour related to the discharge of effluent to Bass Strait from Eastern Treatment Plant. In 2005/06 Melbourne Water received two Penalty Infringement Notices for pollution and late notification related to a failure of a sludge supernatant pump at Eastern Treatment Plant. In 2005/06 aluminium sulphate (alum) from the Winneke water treatment plant lost to Sugarloaf Creek at Christmas Hills was identified and contained in November 2005. The cause was a leaking chemical pipeline that went undetected because it was within a wall cavity at the plant. The leak is likely to have occurred for many weeks before being realised and finally resulted in a blue colouration to the creek water and a small number of dead fish in Watsons Creek. EPA Issued a Clean Up Notice for this incident. In 2005/06 fluorosilicic acid (a liquid form of fluoride) from the Cardinia water treatment plant was lost to Cardinia Creek at Beaconsfield. The cause was a leaking chemical pipeline within a part of the plant that was out of service at the time of the incident. The leak occurred intermittently over a period of 3 weeks before it was identified and stopped. Inspection of the creek revealed no sign of fish deaths. These two offences were heard together in the Magistrates' Court on 29 August 2007 with both found proven without a conviction recorded against Melbourne Water. Melbourne Water was required to make contributions to an environmentally relevant community project totalling \$150,000 and also had to pay for the EPA's technical reports and its legal costs. In 2006/07 Melbourne Water was issued		
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remediation of the Dandenong Wastewater Treatment Plant. Melbourne Water inherited this plant from a previous organisation. The remediation work has now been completed. If the party taking the action is a corporation, will the action be taken in accordance		
If yes, provide details of environmental policy and planning framework		
All works will be undertaken in accordance with Melbourne Water environmental policies. Construction works will also be in accordance with the project Environmental Management Plan.		

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	y taking the action previously referred sible for undertaking an action referred		х	
Provide nam	e of proposal and EPBC reference num	ber (if known)		
Ref. No.	Project Title	Outcome		
2015/7515	Melbourne Water WTP Stage 2 Capacity Augmentation Project	Approval not required.		
2014/7313	WTP Stage 1 Augmentation	Not a controlled action if undertaken in a particular manner.		
2014/7156	Kayes Drain drainage works	Approval not required.		
2013/6939	WTP: Sludge drying pan refurbishment	Not a controlled action if undertaken in a particular manner.		
2013/6719	Kew: North Branch Sewer Upgrade	Approval not required.		
2012/6678	Seaford Wetlands Hydrology Works	Not a controlled action if undertaken in a particular manner.		
2011/5992	Bunyip Main Drain Bank Rehabilitation Works	Approved with conditions.		
2011/5926	Edithvale Wetlands Bird Hide Repairs, Vic.	Approval not required.		
2011/5921	WTP: Class C Recycled Water Supply Reliability Improvement	Not a controlled action if undertaken in a particular manner.		
2010/5654	Mordialloc Creek: Wetland Lot 4 Governor Road Braeside	Approval not required.		
2010/5641	Replace the existing weir at Dights Falls with a new weir and vertical slot fishway, Yarra River	Approval not required.		
2010/5626	Eastern side of Turntable Way, Caroline Springs: Modification of an artificial dam into a constructed wetland and water retarding basin	Approval not required.		
2010/5376	Upgrade to Eastern Treatment Plant	Approval not required.		
2009/5249	Modifications to Laverton Wetland inflow & outflow structures	Approval not required.		
2009/5098	Construction of Cardinia Reservoir integration works and associated infrastructure, Cardinia Reservoir Park, VIC	Approval not required.		
2009/5036	Upgrade of Capacity and Infrastructure	Not a controlled action if undertaken in a particular manner		
2009/4831	WTP: Western Lagoon Saltmarsh Restoration	Not a controlled action if undertaken in a particular manner		
2009/4704	Sugarloaf Reservoir, Watsons Creek Catchment: Mini-Hydro, comprised of a	Approval not required.		

			Yes	No
	4.275MW generator and 11kV underground power cable			
2008/4614	Cooper St, Epping: Edgars Creek Drainage Enhancement	Not a controlled action if undertaken in a particular manner.		
2008/4602	Near Musteys Bridge, Lancefield: Woody Weed Control and Revegetation of Deep Creek	Approval not required.		
2008/4221	WTP Land Use Strategy and Outsourcing Arrangements	Approved with conditions.		
2008/3960	Sugarloaf Water Pipeline Project	Approved with conditions.		
2007/3622	Tarago Water Treatment Plant	Approval not required.		
2007/3229	ETP: Additional aeration tanks for Eastern Treatment Plant.	Approval not required.		
2007/3218	Edithvale-Seaford Wetlands: Wetlands Discovery Centre.	Not a controlled action if undertaken in a particular manner.		
2006/2875	Pascovale, Essendon, Coburg: Northern Sewerage Project Stages 1 & 2.	Approval not required.		
2006/2620	WTP: Sludge Management and Biosolid Handling Facility.	Approval not required.		
2002/890	WTP: Removal of sludge to produce dried biosolids.	Approval not required.		
2002/688	WTP: Environment Improvement Project (post Effluent Reuse Stage 2).	Approved with conditions.		
2002/646	WTP: Pipeline to transport recycled wastewater.	Approval not required.		
2001/273	WTP: Effluent Reuse Stage 2).	Approval not required.		
2001/185	WTP: Groyne and beach works.	Approval not required.		
2000/100	WTP: Biogas Utilisation Facility.			

# 8 Information sources and attachments

(For the information provided above)

# 8.1 References

- List the references used in preparing the referral.
- Highlight documents that are available to the public, including web references if relevant.
- Department of Environment Overview of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula (http://www.environment.gov.au/cgi-bin/wetlands/ramsardetails.pl?refcode=18#)
- Ecology Australia (2015a) Western Treatment Plant: Updated flora assessment of Effluent Discharge Improvement Works (multiple outlets)
- Ecology Australia (2015b) Western Treatment Plant: Updated fauna assessment of Effluent Discharge Improvement Works (multiple outlets)
- DSE (2003) Port Phillip (Western Shoreline) and Bellarine Peninsula Ramsar Site Strategic Management Plan (Department of Sustainability, East Melbourne)
- DSE (2007) Relationships between Shorebird and Benthos Distribution at the Western Treatment Plant. Technical Report Series No. 169 report prepared by DI Rogers, RH Lyon, S McKay, D Bryant, R Swindley and P Papas (Arthur Rylah Institute for Environmental Research, Department of Sustainability and Environment Heidleberg)
- Melbourne Water (2003) Western Treatment Plant Environment Protection and Biodiversity Conservation Compliance Plan 2003. Melbourne Water Corporation report for the Department of the Environment & Heritage, Canberra.
- Melbourne Water (2008) Western Treatment Plant Environment Protection and Biodiversity Conservation Compliance Report for 2008. Melbourne Water Corporation report for the Department of the Environment & Heritage, Canberra.
- Melbourne Water (2012) Western Treatment Plant 2012 Compliance Report for EPBC 2002/688. Melbourne Water Corporation report for the Department of the Environment & Heritage, Canberra.
- Rogers, D.I. and R.H. Loyn (2012) Shorebird Foraging Ecology Study.
- Steele, W.K. (1996) An Annotated Bibliography of Interrelationships between Waterbirds and Changes in Effluent Flows: with particular reference to the Western Treatment Plant, Victoria. Royal Australasian Ornithologists Union Report 112 (Royal Australasian Ornithologists Union: Hawthorn East).
- Theiss, Black and Beach (2015) WTP Effluent Discharge Improvement Works (Multiple outlets) Constructability Report. Report prepared by U Alwis and R Owen-Roberts (Theiss, Black and each Melbourne)

# 8.2 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 following reports were specifically developed for the purpose of the Project assessment:

- Ecology Australia (2015b) Western Treatment Plant: Updated fauna assessment of Effluent Discharge Improvement Works (multiple outlets). The impacts were assessed and documented by a qualified zoologist.
- Ecology Australia (2015a) Western Treatment Plant: updated flora assessment of Effluent Discharge Improvements Works (multiple outlets). The study area was assessed by a botanist on the 7 August 2014 to evaluate the flora and fauna values of the study area and identify potential offsets
- Theiss, Black and Beach (2015) WTP Effluent Discharge Improvement Works (Multiple outlets) Constructability Report: A report describing potential construction activities and methodologies for the multiple outlets project.

# 8.3 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.

		$\checkmark$	
		attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the project locality (section 1)	$\checkmark$	Attachment A
	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)	✓	Attachment B Protected Matters report (2015) Attachment C Ecology Australia 2015 Western Treatment Plant: Updated flora assessment of Effluent Discharge Improvement Works (multiple outlets) Attachment D Ecology Australia (2015) Western Treatment Plan Updated fauna assessment of Effluent Discharge Improvement Works (multiple outlets)
If relevant, attach	copies of any state or local government approvals and consent conditions (section 2.5)		
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)		
	copies of any flora and fauna investigations and surveys (section 3)	✓	Attachment C Ecology Australia 2015 Western Treatment Plant: Updated flora assessment of Effluent Discharge Improvement Works (multiple outlets)
			Attachment D Ecology Australia (2015) Western Treatment Plan Updated fauna assessment of Effluent Discharge Improvement Works (multiple outlets)
	technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)	~	Attachment B Protected Matters report.
			Attachment E Theiss, Black and Beach (2015) WTP Effluent Discharge Improvement Works (Multiple outlets) Constructability Report
	report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		

# 9 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 action.

# Project title:

#### 9.1

#### 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 Act<sup>2</sup>, 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 action<sup>3</sup>.

1. Name and Title:	John Sheils
	Senior Project Manager
2. Organisation (if applicable):	Melbourne Water Corporation
3. EPBC Referral Number (if known):	
4: ACN / ABN (if applicable):	81 945 386 953
5. Postal address	PO Box 4342, Melbourne VIC 3001
6. Telephone:	(03) 9679 7630
7. Email:	John.Sheils@mebournewater.com.au

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

9. ACN/ABN of designated proponent (if not the same person named at item 1 above):

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> If a person other than the person proposing to take action is to be nominated as the proponent, please contact the Referrals Gateway(1800 803 772) to obtain an alternative contacts, signatures and declarations page.

#### 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 <u>EPBC Regulations</u>. 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:

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.

not applicable.

I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature

15h	DD
	ومقوسه بالمراجعة المتحري ومعاليها ومكارز مرجعاته وتراطعهما

Date	9/	12/2015
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#### 9.2

**Person preparing the referral information (if different from 8.1)** Individual or organisation who has prepared the information contained in this referral form.

Name	Emma Connell	
Title	Environment Manager	
Organisation	CNC Project Management	
ACN / ABN (if applicable)	ACN: 119 449 286	
Postal address	Level 7, 276 Flinders Street, Melbourne, Victoria, 3000	
Telephone	(03) 9663 4827	
Email	Emma.connell@cncprojects.com.au	
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 9/12/15	

# **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 <u>Attachment A</u>) 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 pipline) 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. (<u>http://www.anzlic.org.au/policies\_guidelines#guidelines</u>).

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/)