

Form

Referral of a proposal under s. 38 of the EP Act

PART A: PROPONENT AND REFERRER INFORMATION AND PROPOSAL DESCRIPTION

Referrer information

Who is referring this proposal?

Water Corporation

☒ Proponent

☐ Decision-making authority

☐ Community member/third party

Name (print)

Water Corporation

(Contact: Aaron Thorburn)

Signature



Position

Team Leader – EIA & Approvals
Environment Business Unit

Organisation

Water Corporation

Email

environment@watercorporation.com.au

Phone

(08) 9420 2843

Address

Water Corporation
PO Box 100
Leederville, WA 6902

Suburb Leederville

State WA

Postcode 6902

Date

21/07/2023

Does the referrer request that the EPA treat any part of the proposal information in the referral as confidential?

Provide confidential information in a separate attachment.

☐ Yes

☒ No

Does the referrer confirm that they consent to receive correspondence electronically?

☒ Yes

☐ No

Referral declaration for proponent and Authorised representative:

I, **Aaron Thorburn** declare that I am authorised to refer this proposal on behalf of ...**Water Corporation**.....and further declare that the information contained in this form is true and not misleading.

Date: 21/07/2023

Proponent information

Name of the proponent/s

Include Trading Name if relevant

Water Corporation

Australian Company Number(s)

☐

28 003 434 917

OR

Australian Business Number(s)

☒

Pre-referral discussions	
<p>Have you had pre-referral discussions with the EPA (including the EPA Services of DWER)?</p> <p><i>If so, provide name, date, and overview of discussions.</i></p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p>Consultation with Department of Water and Environmental Regulation (DWER) has been ongoing throughout the project planning and approvals process. Engagement with DWER is provided in Section 4 of the Referral supporting document and summarised below:</p> <ul style="list-style-type: none"> • <u>02/09/2021</u> - Briefing with DWER regarding Walpole new source options and the proposed borefield trial. Presentation DWER at Quarterly Liaison Meeting. • <u>07/12/2021</u> - Presentation to Sharon Stratico (DWER) regarding Chatley Road Dam and Borefield options as well as environmental and community considerations and a project timeline. • <u>02/02/2022</u> - Planning summary to DWER: detailed options analysis and next steps. • <u>02/05/2022</u> - Presentation to DWER on progressing a borefield trial. Additional information provided to DWER: included Hydrogeological report and proposed monitoring bore locations. • <u>21/02/2023</u> - Request for DWER acknowledgement of hydrocarbon storage within Priority 2 drinking water area for the borefield trial. • <u>16/03/2023</u> - Water Corporation attended DWER Quarterly Liaison Meeting. Update to DWER regarding progress of planning for borefield trial. • <u>03/04/2023</u> - Water Corporation project team met with DWER via Webex to update them on the borefield trial and discuss key messages ahead of the community information sessions. • <u>04/07/2023</u> – Water Corporation met with EPA Services and discussed the intention to refer the Walpole Water Abstraction Trial to EPA within the month.
Proposal information	
<p>Proposal name</p>	<p>Walpole New Source Borefield Water Abstraction Trial</p>
<p>What is the proposal? (Include general description in the Instructions and template: How to identify the content of a proposal)</p>	<p>Water Corporation propose to conduct a 6-month water source abstraction trial to assess the long term viability of a new water source for Walpole, Western Australia. The trial will be conducted during the summer peak water demand period and will use existing infrastructure. The source comprises three existing deep fractured rock bores located within the following Water Corporation Lots:</p> <ul style="list-style-type: none"> • Bore 5/09 is located within the Swan Road road reserve • Bore 3/20 is located within part of Lot on Plan P209284 12737 • Bore 5/20 is located within part of Lot on Plan P064982 86

		The abstraction bores will be operated up to 24 hours, seven days a week to produce a total groundwater volume of up to 415 kilolitres (kL)/day at an abstraction rate of up to 4.6 L/s.
Have you provided electronic spatial data, maps, and figures in the appropriate format?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
What type of proposal is being referred? <i>For significant amendment or derived proposal, provide the associated existing Ministerial statement number/s</i> <i>For a proposal under an assessed planning scheme, provide the scheme number and name</i>	<input checked="" type="checkbox"/> significant proposal. <i>Choose which type of significant proposal</i> <input checked="" type="checkbox"/> new proposal <input type="checkbox"/> significant amendment (proposal only) <input type="checkbox"/> significant amendment (conditions only) <input type="checkbox"/> significant amendment (proposal and conditions) <input type="checkbox"/> strategic proposal <input type="checkbox"/> derived proposal <input type="checkbox"/> proposals of a prescribed class <input type="checkbox"/> proposal under an assessed planning scheme	
Proposal content: Complete the corresponding template (Proposal Content Document) from the Instructions and template: How to identify the content of a proposal for the type of proposal identified above. The completed form must be submitted with the referral.		
Alternatives	Refer to Section 2.3 of the supporting document. Alternatives water sources which have previously been considered include: <ul style="list-style-type: none"> • Chatley Road Dam, which was not considered suitable due to dam safety concerns. • Two superficial Swann Road bores unsuitable source due to inadequate yields. • The Walpole River, which was not considered suitable due to environmental and social values. Not undertaking the action is not a sustainable option due to the current and predicted water demands from Walpole. Implementation of the proposed trial will provide the data required to understand the rate of drawdown from the aquifer to determine suitability has a long-term water source. The trial will also identify if there is a connection between aquifers and the degree of connectivity.	

PART B: ASSESSMENT OF ENVIRONMENTAL IMPACTS

Environmental factors

What are the likely significant environmental factors for this proposal?

- ☐ Benthic Communities and Habitat
- ☐ Coastal Processes
- ☐ Marine Environmental Quality
- ☐ Marine Fauna
- ☒ Flora and Vegetation
- ☐ Landforms
- ☒ Subterranean Fauna
- ☒ Terrestrial Environmental Quality
- ☒ Terrestrial Fauna
- ☒ Inland Waters
- ☐ Air Quality

		<input type="checkbox"/> Greenhouse Gas Emissions <input checked="" type="checkbox"/> Social Surroundings <input type="checkbox"/> Human Health
For each of the environmental factors identified above, complete the following table, or provide the information in a supplementary report		
Potential environmental impacts – for each environmental factor		
1	EPA policy and guidance	Relevant environmental factors are discussed in the following sections of the supporting report: <ul style="list-style-type: none"> • Flora and vegetation – Section 7 • Subterranean fauna – Section 8 • Terrestrial environmental quality - Section 9 • Terrestrial fauna – Section 10 • Inland waters – Section 11 • Social surroundings – Section 12 Other environmental factors are discussed in Section 13 of the report.
2	Receiving environment	
3	Likely environmental impacts	
4	Application of the mitigation hierarchy	
5	Assessment and significance of residual impacts	
6	Likely environmental outcomes	
Holistic impact assessment		
<p>Refer to Section 16 of the supporting document.</p> <p>While the impacts of the proposal against the key environmental factors has been assessed individually, given the link between flora and vegetation, terrestrial fauna, inland waters and the potential impacts from groundwater drawdown, the connections and interactions between parts of the environment to inform a holistic view of impacts to the whole environment have also been considered.</p> <p>The proposal has been designed to avoid all direct impacts to native vegetation with all infrastructure related to the proposed groundwater abstraction trial located in already cleared and disturbed areas. Of the modelled 149.43 ha zone of influence, only 72.96 ha (48.83%) comprises native vegetation. However, of this only 0.79 ha (0.5% of the zone of influence) is considered likely to be temporarily impacted by the predicted groundwater drawdown.</p> <p>There is also a potential connection between the Social Surroundings and Inland Waters environmental factors. The Walpole River was identified to be a potential site of cultural significance during the Aboriginal Heritage Survey (Aboriginal Land Services, 2023). The proposed groundwater drawdown could potentially impact the Walpole River. It is noted that the Walpole Weir is located outside (southeast of) the zone of influence. The Walpole Weir is located outside (southeast of) the zone of influence. Due to the impounding impacts of the Walpole Weir, the water levels upstream and within the zone of influence, are no longer representative of the original hydrology.</p> <p>Through the implementation of the proposed monitoring, triggers and contingency criteria outlined in the GDEMP, the potential impacts from groundwater drawdown on the environmental factors of flora and vegetation, terrestrial fauna, inland waters and social surroundings would be minimised. When the separate environmental factors of the proposal are considered together, and application of the mitigation hierarchy, the impacts from the proposal on environmental values are considered to be manageable during the 6 month trial period.</p>		
Cumulative environmental impact assessment		
<p>Refer to Section 17 of the supporting document.</p> <p>Water Corporation has assessed the cumulative environmental impacts through consideration of the significance of the impacts of the proposal, both in isolation (this proposal referral) and cumulatively (the proposal, together with other projects in the region) as summarised below:</p> <ul style="list-style-type: none"> • There is potential for the proposal to result in indirect, temporary groundwater drawdown impacts to 0.79 ha (0.5% of the zone of influence) of terrestrial GDEs in Excellent condition. This vegetation is associated with the Kordabup vegetation complex. A search of environmental approvals and applications within 5km of the proposal to assess the potential cumulative impacts to flora and vegetation identified approved clearing of up to 2.92 ha of vegetation. This vegetation does not comprise the Kordabup vegetation complex and it is not considered that the proposal presents a significant cumulative impact to this vegetation complex. Furthermore, as the proposal does not involve direct impacts to flora and vegetation, the risk relative to current, proposed or cumulative impacts are not considered significant. • Stakeholder consultation undertaken as part of the proposal did not identify any potential surrounding groundwater users and cumulative impacts from groundwater abstraction to subterranean fauna is not considered likely to be significant. 		

<ul style="list-style-type: none"> • The approvals to clear vegetation within 5km of the proposal, includes impacts to up to 1.92 ha of potential black cockatoo habitat. The proposals contribution to cumulative impacts from indirect impacts to 1.09 ha of potential black cockatoo habitat is not considered significant. • There are no direct impacts to inland waters. Indirect impacts from the proposal that have been included in this cumulative impact assessment includes Indirect, temporary groundwater drawdown impacts to 0.79 ha (0.5% of the zone of influence) of terrestrial GDEs in Excellent condition. The proposals contribution to cumulative impacts from indirect impacts to inland waters is not considered significant. <p>On the basis of the assessment summarised above and provided in Section 17 of the supporting document, it is not considered that the proposal presents a significant risk relative to current, proposed or cumulative impacts for each key environmental factor.</p>	
Consultation	
<p>Stakeholder engagement is provided in Section 4 of the supporting document. Engagement undertaken with the following stakeholders did not identify any significant concerns or obstacles to implementation of the proposal:</p> <ul style="list-style-type: none"> • Department of Biodiversity, Conservation and Attractions (DBCA) • Department of Water and Environmental Regulation (DWER) • Department of Planning, Lands and Heritage (DPLH) • Local government (Shire of Manjimup) • South West Aboriginal Land and Sea Council (SWALSC) • Wagyl Kaip Southern Noongar representatives • Local community 	
Supporting documents	
<p>EPA Referral Supporting Document; CW01923 Walpole New Source Borefield Trial (RPS 2023). This document includes the following appendices:</p> <ul style="list-style-type: none"> • Appendix A Swann Road Borefield; Flora and vegetation assessment (RPS, 2023) • Appendix B Groundwater Dependent Ecosystem Management Plan (RPS, 2023b) • Appendix C Detailed Stygofauna Survey for the Swann Road Walpole EIA Project (Phoenix, 2023b) • Appendix D Acid Sulfate Soil Detailed Site Assessment; Swann Road Borefield, Walpole (RPS, 2023c) • Appendix E Walpole Implementation and Monitoring Plan (Water Corporation, 2023a) • Appendix F Fuel storage in drinking water catchments • Appendix G Walpole Engineering Summary Report (Water Corporation, 2023c) • Appendix H Terrestrial fauna assessment for the Swann Road borefield, Walpole EIA Project (Phoenix, 2023a) • Appendix I Acid Sulfate Soil Investigation; Walpole Groundwater (Coffey Environments 2010) • Appendix J Test pumping and groundwater investigation (Global Groundwater 2021) • Appendix K Stream fauna assessment for the Swann Road borefield project (Phoenix Environmental, 2023) • Appendix L Short-range endemic invertebrate survey for the Swann Road Walpole EIA Project (Phoenix Environmental, 2023d) • Appendix M Walpole New Source Borefield; Aboriginal Heritage Study (Aboriginal Land Services, 2023) • Appendix N Emergency preparedness and response procedure (Water Corporation, 2023 g) • Appendix O DWER correspondence regarding location & containment of fuel/gensets 	
<p>Has the referrer provided survey information according to the Instructions and Form: IBSA Data Packages and/or the Instructions and form: IMSA Data Packages</p>	<p>✓ Yes <input type="checkbox"/> No</p>
Conclusion	

Implementation of the proposal will not result in any direct impacts to the environment.

Potential indirect impacts will be minimised and managed through implementation of the Groundwater Dependent Ecosystem Management Plan (RPS, 2023b) (Appendix B of the supporting document), Acid Sulfate Soil (ASS) Detailed site assessment (RPS, 2023c) (Appendix D of the supporting document) and the Walpole Implementation and Monitoring Plan (Water Corporation, 2023a) (Appendix E of the supporting document).

Residual impacts are limited to the following, and as such, the proposal is considered unlikely to have a significant impact on the environment:

- Indirect impact from groundwater drawdown to 0.79 ha of vegetation (18.76% of the 4.21 ha at a moderate risk of impacts) in Excellent condition. This vegetation is considered a terrestrial GDE.
- Indirect impacts are limited to the modelled groundwater drawdown of 0.05 m at bore STY-04 (Figure 12), where the previously undescribed stygofauna species (*Bathynellidae* sp. 'Walpole 1') was identified. This species was also identified outside the modelled zone of influence and is therefore not restricted to the modelled groundwater drawdown area.
- Due to the natural, seasonal fluctuations of groundwater levels and groundwater quality, quantifying the potential residual impacts to terrestrial environmental quality resulting from oxidisation of acid sulfate soils is not possible. However, implementation of the monitoring and contingency actions outlined in the ASS Detailed site assessment (RPS, 2023c), GDEMP (RPS, 2023b) and WIMP (Water Corporation, 2023a) will that residual impacts to groundwater or surface water quality resulting from oxidisation of PASS are minimised and consistent with the EPA objective for Terrestrial Environmental Quality (EPA, 2016e).
- Indirect impact to 1.08 ha (0.72% of the zone of influence) of potential fauna habitat providing suitable habitat for conservation significant species such as Baudin's Cockatoo, Carnaby's Cockatoo and Forest Red-tail Black-cockatoo, Quokka, Quenda, Nornalup frog, Rakali, Western false pipistrelle.
- Alteration of groundwater levels (drawdown) may result in reduced baseflow within the Walpole River, potentially resulting in reduced water levels and stream flow. However, as discussed previously, due to the natural seasonal cessation of flows within the river during summer, impacts to flows from the proposal are unlikely to be significant.

PART B: ASSESSMENT OF ENVIRONMENTAL IMPACTS FOR SIGNIFICANT AMENDMENTS ONLY

Type of significant amendment	<input type="checkbox"/> significant amendment to the approved proposal <input type="checkbox"/> significant amendment to the implementation conditions <input type="checkbox"/> significant amendment to both the proposal and the implementation conditions
Information of the approved proposal	N/A
Combined effects of the approved proposal and significant amendment	N/A
Analysis of existing implementation conditions	N/A
Previous changes to the Proposal and or implementation conditions	N/A
Compliance	N/A
Environmental Performance	N/A
Control of implementation of significant amendment	N/A

PART B: ASSESSMENT OF ENVIRONMENTAL IMPACTS FOR A PROPOSAL UNDER AN ASSESSED SCHEME ONLY

What new environmental issues are raised by the proposal that were not assessed during the assessment of the planning scheme?	N/A
How does the proposal not comply with the assessed scheme and/or the environmental conditions in the assessed planning scheme?	N/A

PART B: ASSESSMENT OF ENVIRONMENTAL IMPACTS FOR DERIVED PROPOSALS ONLY

Demonstrate how the proposal will meet the environmental outcomes defined through the assessment of the strategic proposal	N/A
Provide an analysis of the existing implementation conditions of the related strategic proposal in relation to the derived proposal	N/A

PART C: OTHER APPROVALS AND REGULATION

Decision-making authorities and their approvals

Provide a table list of the decision-making authorities, associated legislation or agreement regulating the activity and the specific approval required. (Example table at the end of form)	<p>Refer to Section 3.2 of the supporting report.</p> <ul style="list-style-type: none"> Decision making authority: DPLH Legislation or agreement: Aboriginal Cultural Heritage Act 2021 Approval: If there is a risk for harm to Aboriginal cultural heritage, then authorisation is required under Part 6 of the Act. Whether and how statutory decision-making process can mitigate impacts on the environment: The requirement for authorisation to undertake an action under Part 6 of the Act will prevent significant impacts to Aboriginal heritage.
Provide a summary of the statutory decision-making processes you consider can mitigate the potential impacts of the proposal on the environment. (Note: this should be a summary of the information provided in Part B section 2.4).	<p>Refer to Section 3.2 of the supporting report.</p> <p>The management of activities in accordance with the <i>Aboriginal Cultural Heritage Act 2021</i> will ensure the EPA factor objective for Social Surroundings is met.</p>

Tenure and Local Government approvals

<p>Location of proposal:</p> <p>a) street address, lot number, suburb, and nearest road intersection; or</p> <p>b) if remote, the nearest town and distance and direction from that town to the proposal site.</p>	<p>The three existing deep fractured rock bores located within the following Water Corporation Lots:</p> <ul style="list-style-type: none"> • Bore 5/09 is located within the Swan Road road reserve • Bore 3/20 is located within part of Lot on Plan P209284 12737 • Bore 5/20 is located within part of Lot on Plan P064982 86
<p>Name of the Local Government Authority in which the proposal is located.</p>	<p>Shire of Manjimup</p>
<p>Is rezoning of any land required before the proposal can be implemented?</p> <p>If yes, please provide details.</p>	<p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No</p>
<p>What is the current land use on the property, and the extent (area in hectares) of the property?</p>	<p>The modelled zone of influence from the proposed groundwater abstraction comprises 149.43 ha and encompasses the following lots:</p> <ul style="list-style-type: none"> • Part Lot on Plan F 48 • Part Lot on Plan P219920 13076, R 31501 • Part Lot on Plan P219960 13526 • Part R 31362 • Part Lot on Plan P064982 86 • Part Lot on Plan P064982 87, R 31501 • Part Lot on Plan P167304 12554 • Part Lot on Plan P167304 12386 • Part Lot on Plan P208550 500, R 31501 • Part Lot on Plan P209284 12737 • Part Lot on Plan P166404 12385 <p>Land within the groundwater drawdown impact area is zoned as a combination of National Park (Keystone State Forest) and Other Conservation Reserves, Public Purposes: Water Service, General agriculture, Parks and Recreation Under the Shire of Manjimup Local Planning Scheme 4.</p>
<p>Does the proponent have the legal access required for the implementation of all aspects of the proposal?</p> <p><i>If yes, provide details of legal access authorisations / agreements / tenure.</i></p> <p><i>If no, what authorisations / agreements / tenure is required and from whom?</i></p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
<p>Commonwealth Government approvals</p>	
<p>Does the proposal involve an action that may be or is a controlled action under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Has the proposed action been referred? If yes, when was it referred and what is the reference number (EPBC No.)?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Date: _____</p> <p>EPBC No.: _____</p>

<p>If referred, has a decision been made on whether the proposed action is a controlled action? If 'yes', check the appropriate box and provide the decision in an attachment.</p>	<p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Decision – controlled action <input type="checkbox"/> Decision – not a controlled action </p>
<p>If the proposal is determined to be a controlled action, do you request that this proposal be assessed under a Bilateral Agreement or as an accredited assessment?</p>	<p> <input checked="" type="checkbox"/> Yes - Bilateral <input type="checkbox"/> No <input type="checkbox"/> Yes - Accredited </p>
<p>Is approval required from other Commonwealth Government/s for any part of the proposal? <i>If yes, describe.</i></p>	<p> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Approval: </p>
<p>Decision-making authority referrals <u>ONLY</u></p>	
<p>What approval/s, under your authority, are required for this proposal? <i>Please provide details.</i></p>	