EnviroSci (Pty) Ltd
Reg No 2018/462716 /07

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To whom it may concern

AQUATIC ASSESSMENT OPINION ON THE PROPOSED AMENDMENT OF THE AUTHORISED PAULPUTS WIND ENERGY FACILITY

EnviroSci (Pty) Ltd was appointed to review the proposed amendments against the previous aquatic impact assessment compiled and submitted by the undersigned. Paulputs Wind Energy Facility RF (Pty) Ltd received Environmental Authorisation on 11 December 2019. Following receipt of the authorisation, the client has proposed that three Part 2 amendment applications and one Basic Assessment application be compiled and submitted to the DEA for consideration of authorisation. This statement will focus on the amendment application referred to as 'Paulputs South WEF' amendment.

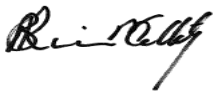
The authorised Paulputs WEF is approved for the maximum height to tip of the blade of 230m, with a hub height of up to 140m, a rotor diameter of up to 180m and a blade length of up to 90m. Paulputs Wind Energy Facility South ('Paulputs South') intents to construct and operate a 150MW WEF (Paulputs South WEF) consisting of up to 35 turbines, with a hub height of up to 180m, blade length of up to 110m (inclusive of the bat and bird sensitivities) and a rotor diameter of up to 220m. A separate Basic Assessment Report is being undertaken to authorise an overhead powerline and substation compound with Battery Energy Storage for the Paulputs South WEF to operate.

The aforementioned amendment has little bearing on the aquatic environment as the footprint would not result in any changes to the impacts previous assessed. Therefore the significance of the impact would remain low after mitigation during the construction, operation and decommissioning phases of the project as the with the exception of road crossings. All the delineated systems with a High Sensitivty, as is required by the Biodivesity Assessment Protocols – Aquatic Theme, will be avoided

In conclusion, the final impact of the proposed amendment on the aquatic ecological environment with mitigation will remain unchanged from the original impact assessment, i.e. it will remain of low significance. Thus, based on the findings of this study, the specialist has no objection to the approval of the proposed amendment. Similarly, in the assessment of potential cumulative impacts, no additional impacts or changes to the previously assessed impacts would be required due to the proposed amendment. Further, no changes to the original mitigations or EMPr considerations are required.

Please don't hesitate to contact me directly should you have any further queries.

Yours Sincerely



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Appendix 1: Site verification report, as per the DEFF Screening Tool

In the assessment of the proposed amendment, the Aquatic Biodiversity Specialist Assessment (Enviro Sci Pty Ltd, 2019 and 2021) was reviewed against the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Aquatic Biodiversity (Government Notice 320, dated 20 March 2020), a site sensitivity verification was undertaken in order to confirm the current land use and environmental sensitivity of the proposed project area as identified by the National Web-Based Environmental Screening Tool (Screening Tool).
The details of the site sensitivity verification are noted below:

Date of Site Visit	Late May 2010, July 2014, April 2016, October 2018
Specialist Name	Dr Brian Colloty
Professional Registration Number	400268/07
Specialist Affiliation / Company	Lead author of 7 July 2019 Report

Government Notice No. 320, dated 20 March 2020, includes the requirement that an Initial Site Sensitivity Verification Report must be produced for a development footprint. As per Part 1, Section 2.3, the outcome of the Initial Site Verification must be recorded in the form of a report that-

(a) Confirms or disputes the current use of the land and environmental sensitivity as identified by the national web based environmental screening tool;

(b) Contains a motivation and evidence of either the verified or different use of the land and environmental sensitivity;

(c) Is submitted together with the relevant reports prepared in accordance with the requirements of the Environmental Impact Assessment Regulations.

This report has been produced specifically to consider the aquatic biodiversity theme and addresses the content requirements of (a) and (b) above. The report will be appended to the respective specialist study included in the Amendment Report produced for the project.

<u>Site sensitivity based on the aquatic biodiversity theme included in the Screening Tool and specialist assessment</u>

Based on the DEFF Screening Tool, the Paulputs North WEF and Paulputs South WEF were rated <u>Very High</u> sensitivity due to rivers, wetlands / Esturies and/or Freshwater ecosystem priority area quinary catchments present (See Figure 1 and 2 below).

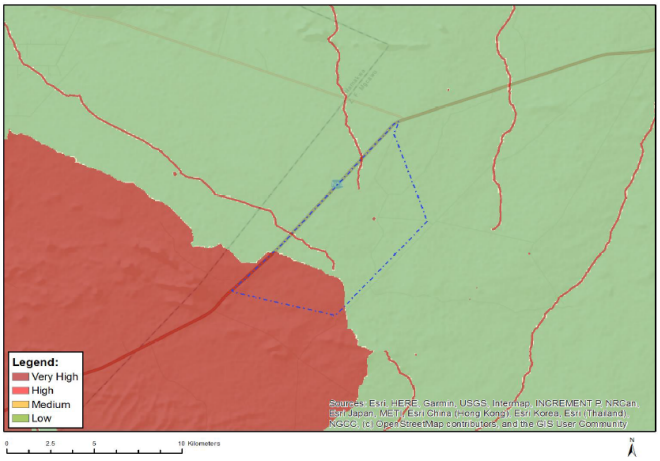

Figure 1. DEFF Screening Tool outcome for the aquatic biodiversity theme for Paulputs South WEF

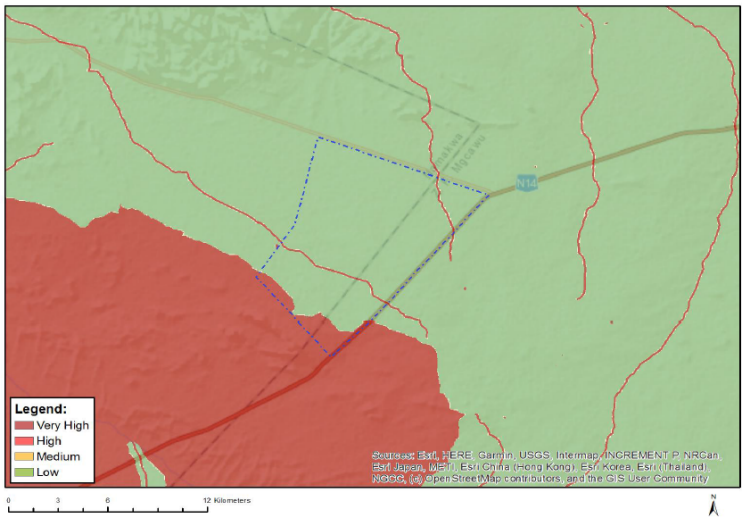

Figure 1. DEFF Screening Tool outcome for the aquatic biodiversity theme for Paulputs North WEF

The secialist confirms that site is drained by several non-perennial watercourses, hence would be considered to be within FEPA quaternary catchments. Wetland and River features are confirmed to be present. In general aquatic features are avoided as far as possible and are limited to road crossings where necessary.

Plate 1: A view of the typical small water course within the study area

Plate 2: The Kaboep River near the Orange River confluence

The Present Ecological State (PES) of the Rivers

The Present Ecological State of a river represents the extent to which it has changed from the reference or near pristine condition (Category A) towards a highly impacted system where there has been an extensive loss of natural habit and biota, as well as ecosystem functioning (Category E).

The national Present Ecological Score or PES scores have been revised for the country and based on the new models, aspects of functional importance, as well as direct and indirect impacts - have been included (DWS, 2014). The new PES system also incorporates EI (Ecological Importance) and ES (Ecological Sensitivity) separately as opposed to EIS (Ecological Importance and Sensitivity) in the old model. Although the new model is still heavily centered on rating rivers using broad fish, invertebrate, riparian vegetation and water quality indicators.

The Present Ecological State scores (PES) for the drainage lines and the rivers in the study area was rated as follows (DWS, 2014 – where D = Largely Modified and E= Critically modified):

Subquaternary Catchment Number	Present Ecological State	Ecological Importance	Ecological Sensitivity
3445	B	High	High
3449	C	High	High

In general aquatic features are avoided as far as possible and are limited to road crossings where necessary. The significance of the impact would remain low after mitigation during the construction, operation and decommissioning phases of the Paulputs South WEF project, as the with the exception of road crossings all the delineated systems with a High Sensitivity as is required by the Biodiversity Assessment Protocols – Aquatic Theme will be avoided.

Motivation of the outcomes of the sensitivity map and key conclusions.

In conclusion, the finding of the DEFF Screening Tool can be upheld. With regard the wind farm (North and South) components, these will all be located within LOW aquatic sensitive areas and all High Sensitive Areas have been avoided.