

RISK MATRIX (Based on DWS 2015 publication: Section 21 c and I water use Risk Assessment protocol)

Name and Registration No of SACNASP Professional member:

Dr M Ross (Pr Sr Reg no: 400061/09)

Risk to be scored for construction and operational phases of the project. MUST BE COMPLETED BY SACNASP PROFESSIONAL MEMBER REGISTERED IN APPROPRIATE FIELD OF EXPERTISE.

No	Phases	Activity	Aspect	Impact	Severity										Likelihood	Significance	Risk Rating	Confidence level	Control measures	Bordeline LOW Moderate rating classes	PES and EIS of watercourse	
					Flow Regime	Physicochemical (Water quality)	Habitat (Geomorph + Vegetation)	Biota	Severity	Spatial scale	Duration	Consequence	Frequency of activity	Frequency of impact								Legal issues
1	Construction	Vegetation clearing	Create access roads for infrastructure	Removal of vegetation will temporarily destabilise soils and make them subject to potential erosion.	1	1	1	1	1	1	1	3	1	1	1	1	4	12	Low	85%	Erosion control as a general ecological conservation initiative is necessary to protect soils and silts from entering any stormwaters and eventually being transported to surface water ecosystems; Retain construction footprint as localised as possible; Not a significant ecological impact associated with the proposed development.	May impact on the wetland unit under extreme circumstances; No change in PES expected.
			Clearing infrastructure footprint to accommodate construction.	Not a significant impact due to the distance of the proposed development from wetland units.	1	1	1	1	1	1	1	1	3	1	1	1	1	4	12	Low	85%	Erosion control as a general ecological conservation initiative is necessary to protect soils and silts from entering any stormwaters and eventually being transported to surface water ecosystems; Retain construction footprint as localised as possible; Not a significant ecological impact associated with the proposed development.
2	Operations	May impact surrounding wetland units under extreme circumstances but not expected.	Impacts similar to construction phase if maintenance is to be performed, but limited to localised areas; No regular impacts are expected to occur during normal operations.	Similar impacts as construction phase only during maintenance procedures. Made less significant through being limited to isolated areas only and the distance from any wetland units.	1	1	1	1	1	1	1	3	1	1	1	1	4	12	Low	85%	Erosion control as a general ecological conservation initiative is necessary to protect soils and silts from entering any stormwaters and eventually being transported to surface water ecosystems; Retain construction footprint as localised as possible; Not a significant ecological impact associated with the proposed development.	May impact on the wetland unit under extreme circumstances; No change in PES expected.