

Project Name: New Wave Dam											
ENVIRONMENTAL RATING SIGNIFICANCE KEY											
ENVIRONMENTAL RATING SIGNIFICANCE KEY	Number	Aspect	Nature of Impact	Without Mitigation (Baseline)					Without Mitigation Score (Baseline)	Probability (Likelihood)	Extent
				Probability (Likelihood)	Extent	Duration (Frequency)	Magnitude (Intensity/Severity)	Receiving Environment (Consequence)			
CONSTRUCTION PHASE											
	1	Soil contamination	Soil contamination caused by construction workers breaching nature calls out in the bush and fuel spilling onto the ground during refuelling etc.	-7	-3	-2	-7	-3	-5	-2	-2
	2	Dust generation	On site dust nuisance due to inadequate dust control measures.	-7	-2	-2	-4	-2	-4	-3	-2
	3	Waste disposal	Insufficient number of toilets and / or inappropriate disposal of sewage	-7	-3	-2	-3	-3	-4	-1	-1
	4		Littering, inappropriate disposal of spoil and inappropriate disposal of cleaned paint material	-7	-3	-2	-3	-3	-4	-1	-1
	5	Terrestrial biodiversity	Clearance of indigenous vegetation from proposed site	-2	-1	-2	-2	-1	-2	-1	-1
	6		Potential impact on rare or protected species	0	0	0	0	0	0	0	0
	7		Impact on the ESA riparian area	-8	-2	-8	-7	-2	-6	-2	-2
	8		Connectivity; Potential loss of ecological corridors.	-4	-4	-2	-3	-2	-3	-2	-2
	9		Cumulative impacts; Cumulative impact associated with proposed activity.	0	0	0	0	0	0	0	0
	10	Services	Increased demand on services impacting current services capacity (i.e. increased demand for water, electricity, sewage disposal).	0	0	0	0	0	0	0	0
	11	Archaeological Palaeo	Heritage resources of significance may be damaged.	-2	-2	-2	-2	-2	-2	-1	-1
	12		Loss and/or damage to archaeological resources of significance	-1	-2	-8	-1	-1	-3	-1	-1
	13	Freshwater	Contaminated water, sediment and other pollutants from the proposed site may reach the Olifants River. Potential damage to the remaining riparian corridor.	-13	-3	-2	-6	-14	-8	-2	-2
	13	Noise	Potential noise generated by construction work	-5	-1	-2	-2	-2	-3	-2	-1
	14	Visual	Eyescans caused by earthmoving activities, construction vehicles gathered in one place, construction site office, etc.	-3	-2	-2	-2	-1	-2	-3	-2
	15	Geotechnical	Dam structural deficiencies	-16	-1	-4	-9	-10	-8	-1	-3
16	Socio-economic	Creation of short-term employment opportunities during the dam construction phase	16	2	4	4	4	6			
OPERATIONAL PHASE											
1	Freshwater	Stormwater contamination, seepage and increased agricultural runoff, resulting in eutrophication.	-16	-2	-2	-2	-2	-5	-1	-1	
2	Terrestrial biodiversity	Loss of ecological connectivity	-1	-2	-1	-1	-1	-2	-1	-2	
3	Socio-economic	Increase in the water security of the farm and consequent increase in job security	16	2	4	9	8	8			

With Mitigation			With Mitigation Score (Impact Assessment)	Short Description of some Mitigation Measures / Enhancement Measures
Duration (Frequency)	Magnitude (Intensity Severity)	Receiving Environment (Consequence)		
-2	-3	-2	-3	provided for workers and the toilets must be placed at least 32m from the nearest bank of
-2	-1	-2	-2	more than 30km per hour and the site should be sprayed with water whenever dust
-2	-1	-1	-2	occupants of vehicles that come to the site and leave the site must be kept aware that littering is not allowed. This
-2	-1	-1	-2	occupants of vehicles that come to the site and leave the site must be kept aware that
-2	-1	-1	-2	The recommendation contained in the Biodiversity Compliance Statement
0	0	0	0	The EMPr as well as the recommendations contained in the biodiversity compliance statement must be implemented
-8	-2	-2	-4	maintain vegetation on dam wall and keep clearing alien vegetation regularly from
-2	-2	-2	-2	The EMPr as well as the recommendations contained in the freshwater specialist
0	0	0	0	
0	0	0	0	
-1	-1	-1	-1	encountered during construction that is suspected of being of heritage significance, construction work must be stopped and heritage
-1	-1	-1	-1	encountered during construction that is suspected of being archaeologically
-2	-2	-3	-3	the dry season and pave the toe of the dam.
-2	-1	-1	-2	When construction work more or construction vehicles must be fitted with standard silencers. All silencers must be
-2	-2	-1	-2	Complete project as soon as possible
-1	-1	-1	-2	Import suitable material to site for dam foundation. Use
			#DIV/0!	Employ local residents over other people as much as
-1	-1	-1	-2	Revegetate the new dam wall with indigenous plants under the
-1	-1	-1	-2	N/A