

Project Name: New Wave Dam				Nature of Impact		Without Mitigation (Baseline)				Without Mitigation Score (Baseline)		Probability (Likelihood)		Extent	
ENVIRONMENTAL RATING SIGNIFICANCE KEY				Number	Aspect	Impact	Probability (Likelihood)	Extent	Duration (Frequency)	Magnitude (Intensity/Severity)	Receiving Environment (Consequence)	Without Mitigation Score (Baseline)	Probability (Likelihood)	Extent	
Negative Impacts 	Very Significant Very High >11 to <16	Significant High >7 to <11	Increasing Significance Medium >4 to <7	Insignificant Low <2 to <4 Very Low <1 to <2	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
	Positive Impacts 	Insignificant Low 1 to <4 Increasing Significance Medium 4 to <10 Significant High 10 to 16	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		
			11		Archaeological Palaeo	Heritage resources of significance may be damaged.	-2	-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	Eyescore 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	-2	-5	-1	-1				
2	Terrestrial biodiversity	Loss of ecological connectivity	-1	-2	-1	-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	3	6	7							

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 recommendations 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 the 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 than 30km per hour 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	Revegetate the new dam wall with indigenous plants under the
				Authorise either of the other dam design alternatives.