

**INVERTEBRATE IMPACT ASSESSMENT SUMMARY TABLES**  
**(MARCH 2011)**

**Please note that the significance values in these tables supersede the significance values in the report.**

**DUYNEFONTEIN**

<b>Impact</b>	<b>Intensity</b>	<b>Extent</b>	<b>Duration</b>	<b>Impact on irreplaceable resources</b>	<b>Consequence</b>	<b>Probability</b>	<b>SIGNIFICANCE</b>
1. Direct habitat destruction	High	Low	High	Medium	Medium	Medium	Medium
Mitigated	Medium	Low	High	Medium	Medium	Medium	Medium
2. Indirect habitat alteration by groundwater disturbance	Medium	Medium	High	Medium	Medium	Medium	Medium
Mitigated	Low	Low	High	Medium	Medium	Medium	Medium
3. Habitat fragmentation	Medium	Medium	High	Low	Medium	Medium	Medium
Mitigated	Low	Medium	High	Low	Medium	Medium	Medium
4. Reduction in populations of rare/protected species	Medium	Low	High	Medium	Medium	Medium	Medium
Mitigated	Low	Low	High	Medium	Medium	Medium	Medium
5. Soil and water pollution	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Mitigated	Low	Low	Medium	Medium	Low	Low	Low
6. Dust pollution	Medium	Medium	Medium	Low	Medium	Medium	Medium
Mitigated	Low	Low	Medium	Low	Low	Low	Low
7a. Light pollution - construction phase	High	Medium	High	Medium	High	High	High
Partly mitigated	Medium	Medium	High	Medium	Medium	Medium	Medium
Fully mitigated	Low	Low	High	Medium	Medium	Medium	Medium
7b. Light pollution - operational phase	High	Medium	High	Medium	High	High	High
Partly mitigated	Medium	Medium	High	Medium	Medium	Medium	Medium
Fully mitigated	Low	Low	High	Medium	Medium	Medium	Medium
8. Increased radiation levels	Low	Medium	High	Low	Medium	Medium	Medium
Mitigated	Low	Medium	High	Low	Medium	Medium	Medium

<b>Impact</b>	<b>Intensity</b>	<b>Extent</b>	<b>Duration</b>	<b>Impact on irreplaceable resources</b>	<b>Consequence</b>	<b>Probability</b>	<b>SIGNIFICANCE</b>
9. Road mortality	Medium	Medium	High	Low	Medium	Medium	<b>Medium</b>
Mitigated	Low	Medium	High	Low	Medium	Medium	<b>Medium</b>
10. Increased risk of fire	High	Medium	Medium	Medium		High	<b>High</b>
Mitigated	Medium	Medium	Medium	Medium	Medium	Medium	<b>Medium</b>
11. Spread of alien invasive invertebrate species	High	Medium	High	Medium	High	High	<b>High</b>
Mitigated	Medium	Medium	High	Medium	Medium	Medium	<b>Medium</b>
12. Land invasion by employment seekers	Medium	Medium	Medium	Medium	Medium	Medium	<b>Medium</b>
Mitigated	Low	Medium	Low	Medium	Low	Low	<b>Low</b>
13. Cumulative impacts	High	Medium	High	Medium	High	High	<b>High</b>
Mitigated	Low	Medium	High	Medium	Medium	Medium	<b>Medium</b>
14. Climate change	Medium	Medium	High	Medium	Medium	Medium	<b>Medium</b>
Mitigated	Low	Medium	High	Medium	Medium	Medium	<b>Medium</b>
15. Positive contribution to conservation	Low	Medium	High	Medium	Medium	Medium	<b>Medium</b>
Mitigated	Low	Medium	High	Medium	Medium	Medium	<b>Medium</b>

## **BANTAMSKLIP: CONSTRUCTION IMPACTS**

<b>Impact</b>	<b>Intensity</b>	<b>Extent</b>	<b>Duration</b>	<b>Impact on irreplaceable resources</b>	<b>Consequence</b>	<b>Probability</b>	<b>SIGNIFICANCE</b>
1. Direct habitat destruction	High	Low	High	Medium	Medium	High	Medium
Mitigated	Medium	Low	High	Medium	Medium	High	Medium
2. Indirect habitat alteration by groundwater disturbance	Medium	Medium	High	Medium	Medium	High	Medium
Mitigated	Low	Low	High	Medium	Medium	Medium	Medium
3. Habitat fragmentation	Medium	Medium	High	Low	Medium	High	Medium
Mitigated	Low	Medium	High	Low	Medium	High	Medium
4. Reduction in populations of rare/protected species	Medium	Low	High	Medium	Medium	Medium	Medium
Mitigated	Low	Low	High	Medium	Medium	Medium	Medium
5. Soil and water pollution	Medium	Medium	Medium	Medium	Medium	High	Medium
Mitigated	Low	Low	Medium	Medium	Low	High	Low - Medium
6. Dust pollution	Medium	Medium	Medium	Low	Medium	High	Medium
Mitigated	Low	Low	Medium	Low	Low	High	Low - Medium
7a. Light pollution - construction phase	High	Medium	High	Medium	High	High	High
Partly mitigated	Medium	Medium	High	Medium	Medium	High	Medium
Fully mitigated	Low	Low	High	Medium	Medium	High	Medium
7b. Light pollution - operational phase	High	Medium	High	Medium	High	High	High
Partly mitigated	Medium	Medium	High	Medium	Medium	High	Medium
Fully mitigated	Low	Low	High	Medium	Medium	High	Medium
8. Increased radiation levels	Low	Medium	High	Low	Medium	Low	Low - Medium
Mitigated	Low	Medium	High	Low	Medium	Low	Low - Medium
9. Road mortality	Medium	Medium	High	Low	Medium	High	Medium
Mitigated	Low	Medium	High	Low	Medium	High	Medium
10. Increased risk of fire	High	Medium	Medium	Medium	High	High	High
Mitigated	Medium	Medium	Medium	Medium	Medium	Medium	Medium
11. Spread of alien invasive invertebrate species	High	Medium	High	Medium	High	High	High
Mitigated	Medium	Medium	High	Medium	Medium	Medium	Medium
12. Land invasion by employment seekers	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Mitigated	Low	Medium	Low	Medium	Low	Medium	Low
13. Cumulative impacts	High	Medium	High	Medium	High	High	High

<b>Impact</b>	<b>Intensity</b>	<b>Extent</b>	<b>Duration</b>	<b>Impact on irreplaceable resources</b>	<b>Consequence</b>	<b>Probability</b>	<b>SIGNIFICANCE</b>
Mitigated	Low	Medium	High	Medium	Medium	High	<b>Medium</b>
14. Climate change	Medium	Medium	High	Medium	Medium	High	<b>Medium</b>
Mitigated	Low	Medium	High	Medium	Medium	High	<b>Medium</b>
15. Positive contribution to conservation	Low	Medium	High	Medium	Medium	High	<b>Medium</b>
Mitigated	Medium	Medium	High	Medium	Medium	High	<b>Medium</b>

## THYSPUNT

Impact	Intensity	Extent	Duration	Impact on irreplaceable resources	Consequence	Probability	SIGNIFICANCE
1. Direct habitat destruction	High	Low	High	Medium	Medium	High	Medium
Mitigated	Medium	Low	High	Medium	Medium	High	Medium
2. Indirect habitat alteration by groundwater disturbance	Medium	Medium	High	Medium	Medium	High	Medium
Mitigated	Low	Low	High	Medium	Low	Medium	Low
3. Habitat fragmentation	Medium	Medium	High	Low	Medium	High	Medium
Mitigated	Low	Medium	High	Low	Medium	High	Medium
4. Reduction in populations of rare/protected species	Medium	Low	High	Medium	Medium	Medium	Medium
Mitigated	Low	Low	High	Medium	Low	Medium	Low
5. Soil and water pollution	Medium	Medium	Medium	Medium	Medium	High	Medium
Mitigated	Low	Low	Medium	Medium	Low	High	Low - Medium
6. Dust pollution	Medium	Medium	Medium	Low	Medium	High	Medium
Mitigated	Low	Low	Medium	Low	Low	High	Low - Medium
7a. Light pollution - construction phase	High	Medium	High	Medium	High	High	High
Partly mitigated	Medium	Medium	High	Medium	Medium	High	Medium
Fully mitigated	Low	Low	High	Medium	Low	High	Low - Medium
7b. Light pollution - operational phase	High	Medium	High	Medium	High	High	High
Partly mitigated	Medium	Medium	High	Medium	Medium	High	Medium
Fully mitigated	Low	Low	High	Medium	Low	High	Low - Medium
8. Increased radiation levels	Low	Medium	High	Low	Medium	Low	Low - Medium
Mitigated	Low	Medium	High	Low	Medium	Low	Low - Medium
9. Road mortality	Medium	Medium	High	Low	Medium	High	Medium
Mitigated	Low	Medium	High	Low	Medium	High	Medium
10. Increased risk of fire	High	Medium	Medium	Medium	High	High	High
Mitigated	Medium	Medium	Medium	Medium	Medium	Medium	Medium
11. Spread of alien invasive invertebrate species	High	Medium	High	Medium	High	High	High
Mitigated	Medium	Medium	High	Medium	Medium	Medium	Medium
12. Land invasion by employment seekers	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Mitigated	Low	Medium	Low	Medium	Low	Medium	Low
13. Cumulative impacts	High	Medium	High	Medium	High	High	High

Impact	Intensity	Extent	Duration	Impact on irreplaceable resources	Consequence	Probability	SIGNIFICANCE
Mitigated	Low	Medium	High	Medium	Medium	High	Medium
14. Climate change	Medium	Medium	High	Medium	Medium	High	Medium
Mitigated	Low	Medium	High	Medium	Medium	High	Medium
15. Positive contribution to conservation	Low	Medium	High	Medium	Medium	High	Medium
Mitigated	Medium	Medium	High	Medium	Medium	High	Medium
Thyspunt	Medium	Low	Medium	Medium	Medium	High	Medium
Mitigated	Low	Low	Low	Low	Low	High	Low - Medium

### **IMPACTS OF ACCESS ROADS**

Impact	Intensity	Extent	Duration	Impact on Irreplaceable resources	Consequence	Probability	SIGNIFICANCE
1. Duynefontein	Medium	Medium	High	Medium	Medium	High	Medium
Mitigated	Low	Medium	High	Medium	Medium	High	Medium
2. Bantamsklip	High	Medium	High	Medium	High	High	High
Mitigated	Medium	Medium	High	Medium	Medium	High	Medium
3. Thyspunt	High	Medium	High	Medium	High	High	High
Mitigated	Medium	Medium	High	Medium	Medium	High	Medium

## IMPACTS OF TERRESTRIAL SPOIL DISPOSAL

Impact	Intensity	Extent	Duration	Impact on Irreplaceable resources	Consequence	Probability	SIGNIFICANCE
1. Duynfontein	High	Medium	High	Medium	High	High	High
Mitigated	Medium	Medium	Medium	Medium	Medium	High	Medium
2. Bantamsklip	High	Medium	High	Medium	High	High	High
Mitigated	Medium	Medium	Medium	Medium	Medium	High	Medium
3. Thyspunt	High	Medium	High	Medium	High	High	High
Mitigated	Medium	Medium	Medium	Medium	Medium	High	Medium

## IMPACTS OF THE NO-GO ALTERNATIVE

Impact	Intensity	Extent	Duration	Impact on Irreplaceable resources	Consequence	Prob.	SIGNIFICANCE
1. Duynfontein	Low	Medium	High	Medium	Medium	High	Medium
Mitigated	Medium	Medium	High	Medium	Medium	High	Medium
2. Bantamsklip	Low	Medium	High	Medium	Medium	High	Medium
Partly mitigated	Low	Medium	High	Medium	Medium	High	Medium
Mitigated	Medium	Medium	High	Medium	Medium	High	Medium
3. Thyspunt	Low	Medium	High	Medium	Medium	High	Medium
Partly mitigated	Low	Medium	High	Medium	Medium	High	Medium
Mitigated	Medium	Medium	High	Medium	Medium	High	Medium