

8.1 APPENDIX TO CHAPTER 8 – NRA/TII Criteria for Rating the Magnitude and Significance of Hydrological Impacts at EIA Stage National Roads Authority

APPENDIX 8.1

NRA/TII Criteria for Rating the Magnitude and Significance of Hydrological Impacts at EIA Stage National Roads Authority

NRA/TII, 2009

Table 1 Criteria for Rating Site Attributes – Estimation of Importance of Hydrological Attributes (NRA)

Importance	Criteria	Typical Examples
Extremely High	Attribute has a high quality or value on an international scale	River, wetland or surface water body ecosystem protected by EU legislation e.g. 'European sites' designated under the Habitats Regulations or 'Salmonid waters' designated pursuant to the European Communities (Quality of Salmonid Waters) Regulations, 1988.
Very High	Attribute has a high quality or value on a regional or national scale	<p>River, wetland or surface water body ecosystem protected by national legislation – NHA status.</p> <p>Regionally important potable water source supplying >2500 homes.</p> <p>Quality Class A (Biotic Index Q4, Q5).</p> <p>Flood plain protecting more than 50 residential or commercial properties from flooding.</p> <p>Nationally important amenity site for wide range of leisure activities.</p>
High	Attribute has a high quality or value on a local scale	<p>Salmon fishery.</p> <p>Locally important potable water source supplying >1000 homes.</p> <p>Quality Class B (Biotic Index Q3-4).</p> <p>Flood plain protecting between 5 and 50 residential or commercial properties from flooding.</p> <p>Locally important amenity site for wide range of leisure activities.</p>
Medium	Attribute has a medium quality or value on a local scale	<p>Coarse fishery.</p> <p>Local potable water source supplying >50 homes.</p> <p>Quality Class C (Biotic Index Q3, Q2- 3).</p> <p>Flood plain protecting between 1 and 5 residential or commercial properties from flooding.</p>
Low	Attribute has a low quality or value on a local scale	<p>Locally important amenity site for small range of leisure activities.</p> <p>Local potable water source supplying <50 homes Quality Class D (Biotic Index Q2, Q1).</p> <p>Flood plain protecting 1 residential or commercial property from flooding.</p>

Importance	Criteria	Typical Examples
		Amenity site used by small numbers of local people.

Table 2 Criteria for Rating Site Attributes – Estimation of Magnitude of Impact on Hydrological Attribute (NRA)

Magnitude of Impact	Criteria	Typical Examples
Large Adverse	Results in loss of attribute	Loss or extensive change to a waterbody or water dependent habitat. Increase in predicted peak flood level >100mm. Extensive loss of fishery. Calculated risk of serious pollution incident >2% annually. Extensive reduction in amenity value.
Moderate Adverse	Results in impact on integrity of attribute or loss of part of attribute	Increase in predicted peak flood level >50mm. Partial loss of fishery. Calculated risk of serious pollution incident >1% annually. Partial reduction in amenity value.
Small Adverse	Results in minor impact on integrity of attribute or loss of small part of attribute	Increase in predicted peak flood level >10mm. Minor loss of fishery. Calculated risk of serious pollution incident >0.5% annually. Slight reduction in amenity value.

Magnitude of Impact	Criteria	Typical Examples
Negligible	Results in an impact on attribute but of insufficient magnitude to affect either use or integrity	Negligible change in predicted peak flood level. Calculated risk of serious pollution incident <0.5% annually.
Minor Beneficial	Results in minor improvement of attribute quality	Reduction in predicted peak flood level >10mm. Calculated reduction in pollution risk of 50% or more where existing risk is <1% annually.
Moderate Beneficial	Results in moderate improvement of attribute quality	Reduction in predicted peak flood level >50mm. Calculated reduction in pollution risk of 50% or more where existing risk is >1% annually.
Major Beneficial	Results in major improvement of attribute quality	Reduction in predicted peak flood level >100mm

Table 3 Rating of Significant Environmental Impacts at EIS Stage (NRA)

Importance of Attribute	Magnitude of Importance			
	Negligible	Small Adverse	Moderate Adverse	Large Adverse
Extremely High	Imperceptible	Significant	Profound	Profound
Very High	Imperceptible	Significant/moderate	Profound/Significant	Profound
High	Imperceptible	Moderate/Slight	Significant/moderate	Profound/Significant
Medium	Imperceptible	Slight	Moderate	Significant
Low	Imperceptible	Imperceptible	Slight	Slight/Moderate