

Appendix 8-2

Summary of Potential Construction Effects on Aquatic Valued Components Prior to Mitigation

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Valued Component	Potential Effect	Potential Construction Effects Before Mitigation					Level of Potential Effect ¹
		Extent		Frequency	Reversibility	Ecological Context	
		Magnitude/Geographic Extent	Duration				
Fish Habitat, Fish and Harvested Fish, and Aquatic Species At Risk	Changes in flows, flow patterns, or flooding.	Measurable effect marginally beyond established thresholds of acceptable change.	Timeframe of greater than 10 years.	Occurs once over the duration of the disturbance.	Project-specific effects are permanent.	No adverse ecosystem effects.	Moderate
		Level II	Level III	Level I	Level III	Level I	
	Erosion and sedimentation of streams.	Measurable effect marginally beyond established thresholds of acceptable change.	The potential effect is likely to persist until the completion of construction and rehabilitation activities.	Occurs at sporadic or intermittent intervals.	Readily reversible over a short period of time.	No adverse ecosystem effects.	Moderate
		Level II	Level II	Level II	Level I	Level I	
	Loss of instream habitat.	Measurable effect marginally beyond established thresholds of acceptable change.	Timeframe of greater than 10 years.	Occurs once over the duration of the disturbance.	Project-specific effects are permanent.	No adverse ecosystem effects.	Moderate
		Level II	Level III	Level I	Level III	Level I	
	Loss of riparian vegetation.	Measurable effect marginally beyond established thresholds of acceptable change.	Timeframe of greater than 10 years.	Occurs once over the duration of the disturbance.	Project-specific effects are permanent.	No adverse ecosystem effects.	Moderate
		Level II	Level III	Level I	Level III	Level I	
	Introduction of deleterious substances.	Measurable effect marginally beyond established thresholds of acceptable change.	Short-term activities such as the time required to complete a discrete component.	Occurs at sporadic or intermittent intervals.	Potential effect is potentially reversible but over a long period of time.	No adverse ecosystem effects.	Low
		Level II	Level I	Level II	Level II	Level I	

Valued Component	Potential Effect	Potential Construction Effects Before Mitigation					Level of Potential Effect ¹
		Extent		Frequency	Reversibility	Ecological Context	
		Magnitude/Geographic Extent	Duration				
	Disruption of habitat due to blasting.	Measurable effect marginally beyond established thresholds of acceptable change.	Short-term activities such as the time required to complete a discrete component.	Occurs at sporadic or intermittent intervals.	Potential effect is potentially reversible but over a long period of time.	No adverse ecosystem effects.	Low
		Level II	Level I	Level II	Level II	Level I	
	Temporary crossings.	Measurable effect marginally beyond established thresholds of acceptable change.	Short-term activities such as the time required to complete a discrete component.	Occurs at sporadic or intermittent intervals.	Readily reversible over a short period of time.	No adverse ecosystem effects.	Low
		Level II	Level I	Level II	Level I	Level I	
	Improved access to sensitive habitats.	Measurable effect marginally beyond established thresholds of acceptable change.	Short-term activities such as the time required to complete a discrete component.	Occurs at sporadic or intermittent intervals.	Readily reversible over a short period of time.	No adverse ecosystem effects.	Low
		Level II	Level I	Level II	Level I	Level I	
	Improved access to fishing opportunities at watercourse crossings.	No measureable effect above baseline.	Short-term activities such as the time required to complete a discrete component.	Occurs at sporadic or intermittent intervals.	Readily reversible over a short period of time.	No adverse ecosystem effects.	Low
		Level I	Level I	Level II	Level I	Level I	

Valued Component	Potential Effect	Potential Construction Effects Before Mitigation					Level of Potential Effect ¹
		Extent		Frequency	Reversibility	Ecological Context	
		Magnitude/Geographic Extent	Duration				
	Introduction of aquatic invasive species.	No measureable effect above baseline.	Short-term activities such as the time required to complete a discrete component.	Occurs at sporadic or intermittent intervals.	Potential effect is potentially reversible but over a long period of time.	No adverse ecosystem effects.	Low
		Level I	Level I	Level II	Level II	Level I	

Note: 1 The level of the potential effect was ranked as being 'low', 'moderate' or 'high' based on the extent, frequency, reversibility and ecological context of the potential effect prior to the implementation of mitigation measures, and the probability of the occurrence of the predicted effect. A predicted effect was considered to be 'low' if there is a low probability of occurrence, 'moderate' if it has a moderate probability of occurrence, and 'high' if there is a high probability of occurrence.