

TMI\_153-WL(1)-10\_Table\_3

Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
Bird	American White Pelican <i>Pelecanus erythrorhynchus</i>	ALL	<b>No Effect:</b> The nearest potential American White Pelican habitat in the LSA is >3.5 km from the Project Footprint	N/A	N/A	N/A	3 and 4
Bird	Bald Eagle <i>Haliaeetus leucocephalus</i>	All	<b>No Effect:</b> The nearest potential Bald Eagle nesting or foraging habitat in the LSA is >800 m from the Project Footprint	N/A	N/A	N/A	1 and 2
Bird	Bank Swallow <i>Riparia riparia</i>	ALL	<b>No Effect:</b> Bank Swallow habitat is not present in the LSA.	N/A	N/A	N/A	
Bird	Barn Swallow <i>Hirundo rustica</i>	ALL	<b>No Effect:</b> Barn Swallows are closely associated with human settlements and are very tolerant of human activity. The updated Project footprint will not remove existing potential Barn Swallow nesting habitat (i.e., human structures) in the	N/A	N/A	N/A	5 and 6

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			LSA. The existing nests located in the old tree nursery will not be disturbed.				
Bird	Black Tern <i>Chlidonias niger</i>	ALL	<b>No Effect:</b> The nearest potential Black Tern habitat (i.e., contiguous marsh habitat >20 ha) occurs >1.2 km from the Project Footprint	N/A	N/A	N/A	3 and 4
Bird	Bobolink <i>Dolichonyx oryzivorus</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	11% potential habitat loss in LSA; habitat loss falls below threshold	5 and 6
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	13.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	11.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of	low	13.1% cumulative potential habitat loss in LSA; habitat	

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Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
				potential habitat in the LSA		loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	moderate	ground nesting, particularly vulnerable during nesting period	
Bird	Canada Warbler <i>Cardellina canadensis</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	11.3% potential habitat loss in LSA; habitat loss falls below threshold	1 and 2
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	12.2% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	11.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	12.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	particularly vulnerable during nesting period	

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Bird	Chimney Swift <i>Chaetura pelagica</i>	ALL	<b>No Effect:</b> Chimney Swifts are closely associated with human settlements and are very tolerant of human activity. The Project will not destroy potential Chimney Swift nesting habitats (i.e., human structures) in the LSA	N/A	N/A	N/A	
Bird	Common Nighthawk <i>Chordeiles minor</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	11% habitat loss in LSA; habitat loss falls below threshold	5 and 6
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	13.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	11.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of	low	13.1% cumulative potential habitat loss in LSA; habitat	

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				potential habitat in the LSA		loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	moderate	ground nesting, particularly vulnerable during nesting period	
Bird	Eastern Loggerhead Shrike <i>Lanius ludovicianus migrans</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	11% potential habitat loss in LSA; habitat loss falls below threshold	5 and 6
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	13.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	11.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	13.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	particularly vulnerable during nesting period	

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Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
Bird	Eastern Whip-poor-will <i>Caprimulgus vociferous</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	11% potential habitat loss in LSA; habitat loss falls below threshold	5 and 6
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	13.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	11.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	13.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	moderate	ground nesting, particularly vulnerable during nesting period	
Bird	Eastern Wood Pewee <i>Contopus virens</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	5.5% potential habitat loss in LSA; habitat loss falls below threshold	1 and 2
		Site Prep/Construction	Functional Habitat Loss	20% cumulative	low	5.8% cumulative potential habitat	

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Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
				reduction of potential habitat in the LSA		loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	5.5% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	5.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	particularly vulnerable during nesting period	
Bird	Golden Eagle <i>Contopus virens</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	11.3% potential habitat loss in LSA; habitat loss falls below threshold	1 and 2
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	12.2% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of	low	11.6% cumulative potential habitat loss in LSA; habitat	

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Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
				potential habitat in the LSA		loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	12.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	particularly vulnerable during nesting period	
Bird	Least Bittern <i>Ixobrychus exilis</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	4.2% potential habitat loss in LSA; habitat loss falls below threshold	3 and 4
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	4.3% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	4.2% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential	low	4.2% cumulative potential habitat loss in LSA; habitat	



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Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
				habitat in the LSA		loss falls below threshold	
		Site Prep/Construction and Operation	Exposure to contaminants	SAR behavior and biology	moderate	wetland birds are vulnerable to environmental contamination either through direct exposure or through the decline of prey in effected wetlands	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	particularly vulnerable during nesting period	
Bird	Olive-sided Flycatcher <i>Contopus cooperi</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	5.7% potential habitat loss in LSA; habitat loss falls below threshold	1 and 2
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	6.4% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	6.2% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative	low	6.5% cumulative potential habitat	

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Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
				reduction of potential habitat in the LSA		loss in LSA; habitat loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	particularly vulnerable during nesting period	
Bird	Peregrine Falcon <i>Falco peregrinus anatum</i>	ALL	<b>No Effect:</b> Peregrine Falcon habitat is not present in the LSA.	N/A	N/A	N/A	
Bird	Rusty Blackbird <i>Euphagus carolinus</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	4.7% potential habitat loss in LSA; habitat loss falls below threshold	3 and 4
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	5.0% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	4.7% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	4.8% cumulative potential habitat loss in LSA; habitat loss falls below threshold	

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Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
		Site Prep/Construction and Operation	Exposure to contaminants	SAR behavior and biology	moderate	wetland birds are vulnerable to environmental contamination either through direct exposure or through the decline of prey in effected wetlands	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	particularly vulnerable during nesting period	
Bird	Short-eared Owl <i>Asio flammeus</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	11% potential habitat loss in LSA; habitat loss falls below threshold	5 and 6
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	13.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	11.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential	low	13.1% cumulative potential habitat loss in LSA; habitat	

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Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
				habitat in the LSA		loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	moderate	ground nesting, particularly vulnerable during nesting period	
Bird	<i>Yellow Rail Coturnicops noveboracensis</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	4.2% potential habitat loss in LSA; habitat loss falls below threshold	3 and 4
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	4.3% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	4.2% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	4.2% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Site Prep/Construction and Operation	Exposure to contaminants	SAR behavior and biology	moderate	wetland birds are vulnerable to environmental contamination	

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Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
						either through direct exposure or through the decline of prey in effected wetlands	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	moderate	ground nesting, particularly vulnerable during nesting period	
Bird	Wood Thrush <i>Hylocichla mustelina</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	5.5% potential habitat loss in LSA; habitat loss falls below threshold	1 and 2
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	5.8% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	5.5% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	5.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	

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Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	particularly vulnerable during nesting period	
Mammal	American Badger <i>Taxidus taxus taxus</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	11% potential habitat loss in LSA; habitat loss falls below threshold	5 and 6
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	13.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	11.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	13.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	moderate	American Badgers are not particularly mobile, and may have difficulty escaping project activities	

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Taxon	Species	Phase	Effects	Indicators	Impact	Rationale	Figures
		Site Prep/Construction and Operation	Vehicle Collision	SAR behavior and biology	moderate	vehicle collisions are a leading cause of wildlife mortality associated with human activity	
Mammal	Eastern Cougar <i>Puma concolor</i>	ALL	Direct Habitat Loss	30% reduction of prey species (White-tailed deer and snowshoe hare) in the LSA	low	Eastern Cougar prey species are highly tolerant of human activity, and prey abundance is not anticipated to change	
		ALL	Functional Habitat Loss	30% reduction of prey species (White-tailed deer and snowshoe hare) in the LSA	low	Eastern Cougar prey species are highly tolerant of human activity, and prey abundance is not anticipated to change	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	Cougars are highly mobile and able to escape project activities.	
		Site Prep/Construction and Operation	Vehicle Collision	SAR behavior and biology	moderate	vehicle collisions are a leading cause of wildlife mortality associated with human activity	

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Mammal	Little Brown Myotis <i>Myotis lucifugus</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	11.3% potential habitat loss in LSA; habitat loss falls under threshold.	1 and 2
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	12.2% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	11.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	12.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	Female bats are vulnerable when they are caring for young in maternal roosts	
Mammal	Northern Myotis <i>Myotis septentrionalis</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	11.3% potential habitat loss in LSA; habitat loss falls under threshold.	1 and 2



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		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	12.2% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	11.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	12.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	Female bats are vulnerable when they are caring for young in maternal roosts	
Mammal	Wolverine <i>Gulo gulo</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	11.3% potential habitat loss in LSA; habitat loss falls under threshold. The LSA does not represent high quality Wolverine habitat as it is highly fragmented.	1 and 2

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		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	12.2% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	11.6% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	12.1% cumulative potential habitat loss in LSA; habitat loss falls below threshold	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	moderate	Female Wolverines are vulnerable when they are denning with young in the winter	
		Site Prep/Construction and Operation	Vehicle Collision	SAR behavior and biology	moderate	vehicle collisions are a leading cause of wildlife mortality associated with human activity	

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Reptile	Snapping Turtle <i>Chelydra serpentina</i>	ALL	Direct Habitat Loss	20% reduction of potential habitat in the LSA	low	Potential habitat loss in LSA is negligible (<1%)	7 and 8
		Site Prep/Construction	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	Cumulative potential habitat loss in LSA is negligible (<1%)	
		Operation	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	Cumulative potential habitat loss in LSA is negligible (<1%)	
		Closure	Functional Habitat Loss	20% cumulative reduction of potential habitat in the LSA	low	Cumulative potential habitat loss in LSA is negligible (<1%)	
		Site Prep/Construction and Operation	Exposure to contaminants	SAR behavior and biology	low	Snapping Turtles are tolerant of environmental contamination and can persist in polluted areas	
		Site Prep/Construction and Operation	Direct Mortality	SAR behavior and biology	low	Project activities will not impact waterbodies or watercourses	

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		Site Prep/Construction and Operation	Vehicle Collision	SAR behavior and biology	high	vehicle collisions are a leading cause of wildlife mortality associated with human activity. Snapping Turtles may be drawn to road right-of-ways when searching for basking or nesting sites	