

**Table CI1-Lizard Creek -Natural Heritage Impacts and mitigation of construction works-MNR matrix Comment #69**

Facility or structure	Area (m <sup>2</sup> ) of footprint	Impacts	duration	frequency	timing	residual effect	mitigation	monitoring
Transmission line from powerhouse station to Serpent River Crossing	2299	removal of trees within construction zone, retention of ground cover, vegetation will regrow and may require regular trimming	disturbance during clearing and construction of lines	after initial disturbance may be up to 10 years before trimming needed	cutting to occur outside of breeding bird window May 8-July 31	loss of tree cover and some wildlife habitat functions	limit cut line to only width necessary and limb branches on larger trees on outer edge of cut where possible; revegetate 30 m area from banks of Serpent River; education of workers re SAR	monitoring vegetation plantings within 30 m buffer from Serpent River
Transmission line from Serpent River Crossing south to highway 17 substation	1290	removal of trees within construction zone, retention of ground cover, vegetation will regrow and may require regular trimming	disturbance during clearing and construction of lines	after initial disturbance may be up to 10 years before trimming needed	cutting to occur outside of breeding bird window May 8-July 31	loss of tree cover and some wildlife habitat functions	limit cut line to only width necessary and limb branches on larger trees on outer edge of cut where possible; revegetate 30 m area from banks of Serpent River; education of workers re SAR	monitoring vegetation plantings within 30 m buffer from river
main access road (west) from Highway 17	6756	widening of existing road and upgrade to allow construction vehicle access, requires tree removal and addition of gravel; add gravel to existing road cut (straight section)	disturbance during clearing and construction of gravel road	after initial disturbance may be up to 5 years before trimming needed	cutting to occur outside of breeding bird window May 8-July 31	loss of tree cover and some wildlife habitat functions	limit cut line to only width necessary and limb branches on larger trees on outer edge of cut where possible; education of workers re SAR	no monitoring
access road (bridge to reach 5 dam)	6875	widening of existing cut from survey and testing and upgrade to allow construction vehicle access, requires tree removal and addition of gravel	disturbance during clearing and construction of gravel road	after initial disturbance may be up to 5 years before trimming needed	cutting to occur outside of breeding bird window May 8-July 31	loss of tree cover and some wildlife habitat functions	limit cut line to only width necessary and limb branches on larger trees on outer edge of cut where possible; education of workers re SAR	no monitoring

access road (reach 5 dam to main dam)	549	widening of existing cut from survey and testing and upgrade to allow construction vehicle access, requires tree removal and addition of gravel	disturbance during clearing and construction of gravel road	after initial disturbance may be up to 5 years before trimming needed	cutting to occur outside of breeding bird window May 8-July 31	loss of tree cover and some wildlife habitat functions	limit cut line to only width necessary and limb branches on larger trees on outer edge of cut where possible; education of workers re SAR	no monitoring
access road (main dam to logging road)	6607	widening of existing cut from survey and testing and upgrade to allow construction vehicle access, requires tree removal and addition of gravel	disturbance during clearing and construction of gravel road	after initial disturbance may be up to 5 years before trimming needed	cutting to occur outside of breeding bird window May 8-July 31	loss of tree cover and some wildlife habitat functions	limit cut line to only width necessary and limb branches on larger trees on outer edge of cut where possible; education of workers re SAR	no monitoring
access road (fork to powerhouse)	1475	widening of existing cut from survey and testing and existing ATV trail; upgrade to allow construction vehicle access, requires tree removal and addition of gravel	disturbance during clearing and construction of gravel road	after initial disturbance may be up to 5 years before trimming needed	cutting to occur outside of breeding bird window May 8-July 31	loss of tree cover and some wildlife habitat functions	limit cut line to only width necessary and limb branches on larger trees on outer edge of cut where possible; education of workers re SAR	no monitoring
transformer	80	removal of tree cover and regrading of area to create pad for staging area, powerhouse and parking; upgrade to allow construction vehicle access, requires addition of gravel	disturbance during clearing and construction of pad	after initial disturbance may be up to 5 years before trimming needed	cutting to occur outside of breeding bird window May 8-July 31	loss of tree cover and some wildlife habitat functions	limit cut line to only width necessary and limb branches on larger trees on outer edge of cut where possible; education of workers re SAR	no monitoring
powerhouse	141	same as above						
parking area (powerhouse)	2244	same as above						
staging area (south)	769	same as above						
staging area (north)	600	same as above						

main dam / control structure	1712	removal of vegetation, regrading of area below concrete dam, vehicle and heavy equipment access and worker disturbance	temporary disturbance during clearing and construction on wildlife	only initial disturbance	cutting to occur outside of breeding bird window May 8-July 31;possible fish salvage; erosion and sediment control; dewatering; noise and dust suppression	loss of tree cover and some wildlife habitat functions; temporary disturbance to wildlife; loss of wildlife habitat in footprint	possible fish salvage; erosion and sediment control; dewatering; noise and dust suppression; education of workers re SAR	no monitoring
reach 5 dam /control structure	2695	removal of vegetation, regrading of area below concrete dam, vehicle and heavy equipment access and worker disturbance	temporary disturbance during clearing and construction on wildlife	only initial disturbance	cutting to occur outside of breeding bird window May 8-July 31;possible fish salvage; erosion and sediment control; dewatering; noise and dust suppression	loss of tree cover and some wildlife habitat functions; temporary disturbance to wildlife; loss of wildlife habitat in footprint	erosion and sediment control; dewatering; noise and dust suppression	no monitoring
intake structure (penstock)	88	removal of vegetation, regrading of area below concrete dam, vehicle and heavy equipment access and worker disturbance	temporary disturbance during clearing and construction on wildlife	only initial disturbance	cutting to occur outside of breeding bird window May 8-July 31;erosion and sediment control; dewatering; noise and dust suppression	loss of tree cover and some wildlife habitat functions; temporary disturbance to wildlife; loss of wildlife habitat in footprint	erosion and sediment control; dewatering; noise and dust suppression	no monitoring
conveyance channel	3738	removal of vegetation, excavation of canal and removal of excavated material; ;vehicle and heavy equipment access, noise and worker disturbance	temporary disturbance during clearing and construction on wildlife	only initial disturbance	cutting to occur outside of breeding bird window May 8-July 31; erosion and sediment control; dewatering; noise and dust suppression	loss of tree cover and some wildlife habitat functions; temporary disturbance to wildlife; loss of wildlife habitat in footprint; bridge crossings will allow wildlife to cross; single bridge for wildlife crossing	erosion and sediment control; dewatering; noise and dust suppression	no monitoring

penstock	303	removal of vegetation; excavation of trench for buried penstock, regrading of area post installation and rehab of surface, vehicle and heavy equipment access and worker disturbance	temporary disturbance during clearing and construction on wildlife	only initial disturbance	cutting to occur outside of breeding bird window May 8-July 31;possible fish salvage; erosion and sediment control; dewatering; noise and dust suppression	loss of tree cover and some wildlife habitat functions; temporary disturbance to wildlife; loss of wildlife habitat in footprint; most of penstock buried	erosion and sediment control; dewatering; noise and dust suppression; rehabilitate disturbed area over buried pipe	no monitoring
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