

# Transmission Lines and Grasslands

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# Topics

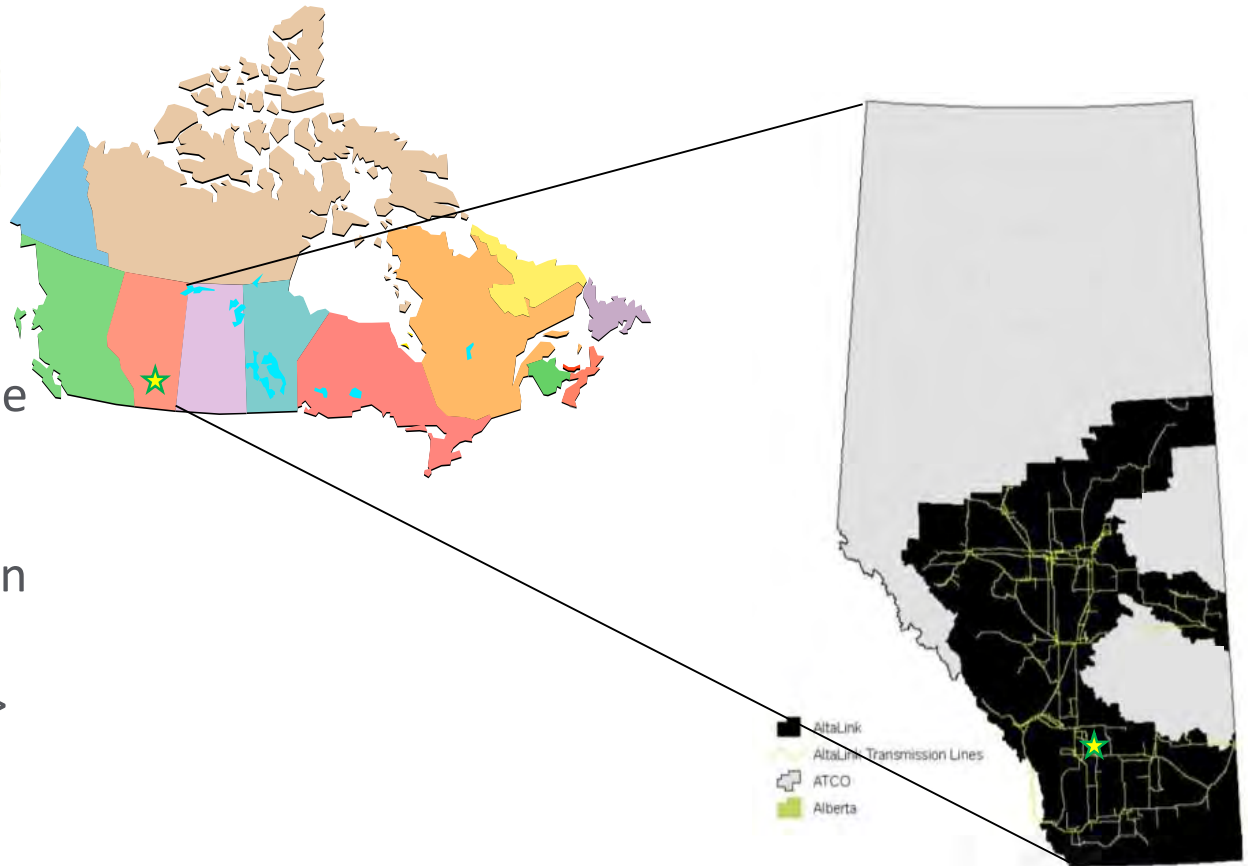
1. Transmission line impacts to grasslands
2. Benefits of mitigating grassland impacts through grassland offsets/banks
3. Current challenges of offsets/banks



# AltaLink



- Alberta's primary transmission service provider
- Serves 85% of Alberta's population
- >13,000 km transmission line, >300 substations



# Transmission Line Impacts on Grasslands

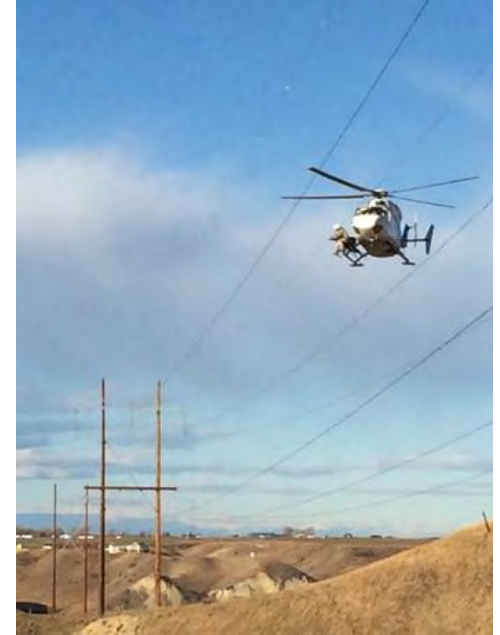
- Ground disturbance
- Sensory disturbance
- Fragmentation
- Predatory/prey dynamics
- Wildlife mortality
- Weeds/invasive species
- Contamination



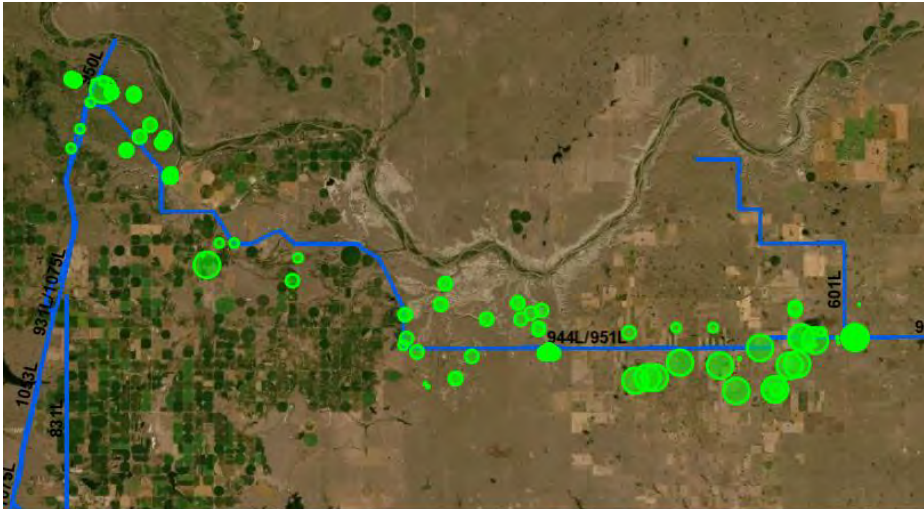
# Ground Disturbance



# Sensory Disturbance



# Fragmentation

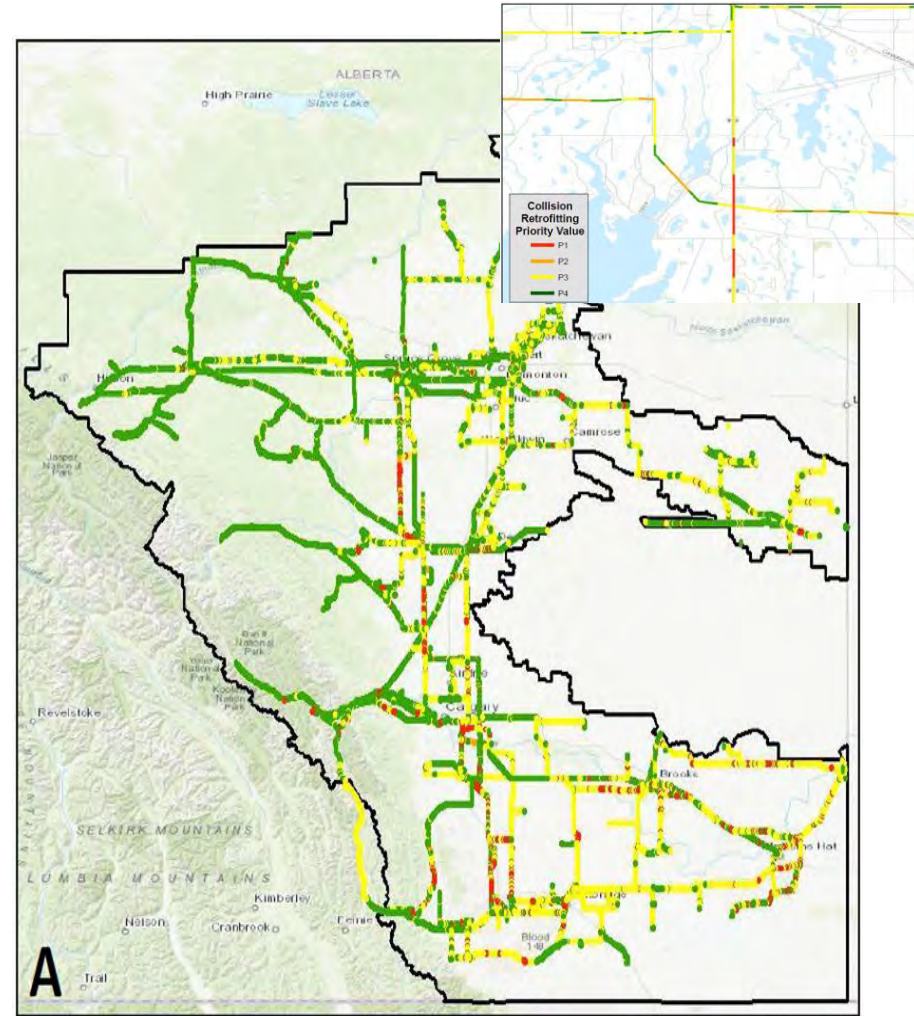


# Predator/prey





# Wildlife Mortality



# Weeds and Contamination



# Benefits of Mitigating Grassland Impacts Through Offsets/Banks

- Reduced Regulator concerns on projects?
- Reduced mitigation costs?



# Benefits of Mitigating Grassland Impacts Through Offsets/Banks

- Corporate image/sustainability
- Increase recreational opportunity?



# Current Challenges to Offsets/Banks

- No current mechanism or legislative requirement
- Ratepayer/customer acceptance (higher electricity cost)
- How to apply to transmission lines (3:1, right-of-way width, etc.)?
- Freehold vs crown-owned land



# Current Challenges to Offsets/Banks

- Water Act approval compensation short falls – approval times and compensation

Project	# of Structures	Affected Area (ha)	Assessment cost	Compensation value (\$)	Application date	Approval date	Review length (# wks)	AEP Office	
658L Salvage	10	0.001	\$17,000	n/a	8/10/2017	11/28/2017	16	Lethbridge	N
749L str replacement	2	0.0000122	\$4,000		10/19/2017	11/7/2017	3	Edmonton	A
749L str removal	1	0.0000066			9/22/2017	10/3/2017	2	Edmonton	A
526L	10	0.000066	\$10,400	n/a	12/15/2017	2/1/2018	7	Spruce Grov	V
202L	2	0.0000122	\$3,445	n/a	12/15/2017	1/10/2018	4	Red Deer	C
703L					2/16/2018	2/27/2018	2	Edmonton	N
Capital Power Whittle	9	0.007	\$16,000	\$800.00	5/23/2018	12/14/2018	19	Lethbridge	E
902L49 New Tower	1	0.0025	\$5,530	\$110.00	8/3/2018	1/14/2019	21	Spruce Grov	E
797L	1	0.005	\$3,430	n/a	8/13/2018	1/30/2019	24	Spruce Grov	E
197L Salvage	5	0.0021	\$13,000	n/a	8/16/2018	4/17/2019	35	Lethbridge	F
508L	1	0.0001	\$2,200	n/a	11/21/2018	1/31/2019	9	Lethbridge	F
174L Salvage	22	0.0001	\$2,795	n/a	12/6/2018	1/24/2019	6	Edmonton	F
835L	1	0.0001	\$4,565	n/a	1/10/2019	2/21/2019	6	Red Deer	E
834L	4	0.0004	\$3,445	n/a	2/4/2019	3/5/2019	4	Edmonton	C
223L	1	0.0002	\$4,385	n/a	2/27/2019	4/18/2019	7	Spruce Grov	C
733L	1	0.0001	\$1,910	\$191	6/6/2019	6/18/2019	2	Edmonton	C
174L New Poles	16	0.002	\$3,443	\$106.00	7/5/2019	TBD	9	Edmonton	A
<b>TOTALS</b>	<b>191</b>	<b>0.21</b>	<b>\$485,684.00</b>	<b>\$11,404.36</b>					

# Questions?

