



Supplementary Figure 1A-I. All study sectors in the Peace River (well pad PRIV) and Cold Lake (well pad CLAK) oil sands regions. An unrestored sector (A. UNR) on CLAK served as a control, where measurements took place on the remaining well pad's mineral soil (MS). Restored sectors are B. CR: Complete removal of MS with a floating moss carpet, C. PR-15: Partial removal of MS to 15 cm above seasonal water table, D. PR-5: Partial removal of MS to 4-6 cm above seasonal water table, E. PR-0-D/W: Partial removal of MS to surface elevation of surrounding fen reference ecosystem (uneven ground relief), F. PR-0-E: Partial removal of MS to same surface elevation of surrounding fen reference ecosystem (even ground relief). Reference ecosystems (REF) were G. SRF: a wooded extreme-rich fen, H. TRF, a wooded rich fen, and I. BOG: a wooded bog.