Peatland Restoration of Abandoned Oil and Gas Well Sites

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Restoring peatlands following in situ industry activity in the boreal region of northern Alberta presents a set of challenges that have yet to be overcome. The lack of proven treatments for restoring peatlands, coupled with a tightening regulatory environment suggest that peatland reclamation is likely to result in substantial long-term liability, possibly even limiting development of the oil sands resource. Expanding the array of restoration methods (e.g., cost-effective procedures to re-connect well sites with the surrounding peatland) and technologies (e.g., techniques of utilizing live moss from donor sites) for peatlands is of utmost urgency given the importance of oil sands extraction to Canada's economic well-being. Our trials will assess and quantify six well pad removal options. Our trials will assess the use of donor site materials in plant establishment. Our trials will assess propagation and establishment methods. Our trials will apply risk management to climate uncertainty.

Policy Issue

The effectiveness of industrial footprint reclamation or functional restoration. One of the primary challenges facing the oil and gas industry is effectively returning a range of landscapes to predisturbance or design conditions.

Knowledge Gap

Reclamation effectiveness of wetlands

Report

2014 Presentation

2015 Presentation