

Evaluating the Revegetation Success of Foothills Fescue Grassland

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Restoring foothills rough fescue grassland remains a profile issue (Southwest Alberta Sustainable Community Initiative -Development and Consultation Roadmap March 2008; the Hard Grass Advocate, 2010; Government of Alberta 2010). Foothills Fescue Prairie in Southern Alberta has recently witnessed increased development including oil & gas (CAPP, 2012). Returning these disturbed areas back to foothills fescue grassland becomes difficult due to ineffective reclamation techniques, unreliable seed sources, competition from weeds and non-native forages and weather extremes (Desserud 2012).

The regulatory context in Alberta is evolving with Sustainable Resources Development (SRD's) new Enhanced Approvals Process (EAP). This process allows for the up-front Landscape Planning Tool (LAT) designed to improve the planning phase to reduce overall impacts from cumulative effects and compliance with standard operating conditions from AESRD, which relies on a

company's self-auditing "results-based" approach where proponents monitor their own dispositions for non-compliances.

Fescue grasslands support a high biodiversity of plants (McGillivray and Steinhilber 1996), supporting rare, uncommon and also several endangered wildlife species. Both landowners and industry concur that it is important to minimize the environmental footprint that oil and gas development operations can have on these remnant grasslands. Understanding the ecology various vegetation layers play in revegetating fescue grassland becomes important in restoring ecological integrity in the 20% remaining Foothills Fescue in Alberta. This is important to the plant and animal species which are not able to live on cultivated lands.

Pilot projects such as revegetation of sensitive fescue grassland support by industries demonstrates an awareness of environmental issues and a willingness by companies to mitigate these issues.

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 native prairie

Reports / Publications

2017 Publication

2015 Final Report

2014 Report

2012 Report

Presentations

2014 Presentation

2013 Presentation

2012 Presentation

2011 Presentation