

## Introduction

Pre-Site Assessment uses a Geographic Information System (GIS) to leverage the biophysical classification of a project site where ground data is linked to the Grassland Vegetation Inventory (GVI). This can be used to evaluate minimum disturbance practises and options for the placement of industrial projects like well sites, access roads and pipelines.

What is the Grassland Vegetation Inventory (GVI)? The GVI represents the government of Alberta's comprehensive biophysical, anthropogenic and land-use inventory of the province's Grassland Natural Region. Information for the GVI project will be collected for the entire area regardless of jurisdiction, including the foothills grasslands (water bodies, native or natural areas, and agricultural, urban and other anthropogenic areas).



• Determine the size and scope of the project, including the infrastructure necessary for full development.

• Delineate the local study area boundaries on digital ortho-rectified colour imagery.

• Map proposed development target areas.

## Conclusions

## Grassland Vegetation Inventory (GVI) Pre-Site Assessment





• Overlay the GVI data layer for the area on the air photo imagery.

• Identify areas of least suitable and most suitable GVI site types.

• Overlay existing industrial and anthropogenic features within the proposed site

analyze slope and topographic issues. Provide options for proposed development locations within the remaining acceptable areas of the proposed disturbance.

• The use of GVI in pre-site assessment allowed for a much more comprehensive identification of an appropriate location for development with minimal amounts of disturbance. • The increased number of variables and fine resolution of the GVI dataset allowed for the development of a better location for proposed development. • This method will hopefully provide a means for industry to decrease its impacts to local ecosystems by choosing the best location possible.



• Additional values are now added such as

- water resources
- ACIMS data
- FWMIS data
- Known noxious plant locations

• Construction issues are identified using a DEM to



Definitions ACIMS - Alberta Conservation Information Management System FWMIS - Fish and Wildlife Management Information System **DEM - Digital Elevation Model GVI - Grassland Vegetation Inventory** 



• Adjust target(s) to avoid or minimize disturbance where possible.

 Consideration of available information makes the decision of where to develop a far more encompassing through decision.