

BIO-RESOURCE INFORMATION MANAGEMENT SYSTEM (BRIMS)

As Alberta grows and seeks to balance economic growth in the natural resource sectors with environmental improvements demanded by citizens, buyers and the global community, the need for new data and tools providing increased transparency and reporting of environmental and natural resource data is crucial.

In 2012, Alberta Innovates Bio Solutions, Silvacom Ltd. and Green Analytics began working on the Alberta Bio-Resource Information Management System (BRIMS) to fill this need.

BRIMS is a system that collates data and information on land use and ecosystem services throughout the province to inform integrated resource management decisions. The data sets and web-based application are designed to provide spatially explicit, up-to-date, investment-grade data to support the following economic and policy initiatives:

- Prioritization of lands for conservation or development;
- Assessments of trade-offs between land use mitigation and development;
- Investments decisions related to biomass supplies;
- Key environmental policies and strategies;
- The development of new policy approaches to balance competing land use; and
- Terrestrial monitoring of ecological functions and associated impacts from linear disturbance.

Phase 1 of BRIMS involved collating data to support a biomass inventory for the province, in which the project team focused on several objectives: evaluating the current science and data for conducting biomass inventory assessments, identifying gaps in current data and science, providing an overview of trends in biomass, developing a business plan for ongoing data procurement, and exploring a viable home for the data.

Phase 1 saw the completion of these objectives, and it also exceeded expectations in many areas. Some of the key accomplishments included:

- The development of an organizational framework of all biomass data from land use sectors, a jurisdictional scan of 37 global biomass assessments
- A review of methods and approaches for conducting assessments for different sources of biomass; and
- A provincial-scale mapping of zones and data sets illustrating the location and attributes of land, biomass, vegetation, terrestrial carbon stores, etc.

Phase 2 of BRIMS is designed to “operationalize” the assembly and distribution of investment-grade data available to inform decision-making on critical ecosystem services in Alberta. More specifically, Phase 2 will focus on providing a world-class web-based application to support spatial data scanning, improved biomass data, and the development of a business plan and implementation strategy for the long-term viability of BRIMS. After completion of Phase 2 Alberta will be better equipped to support public and private sector decision-making related to integrated resource management in the White and Green Zones of the province.