

Project Name	Data Management
Program Area	Decision Support
Project No.	DS01
Related Projects	DS04a: Co-location Modelling to Inform Old Growth Reserve Selection DS 04b: Old Growth Reserve Design Pilot EI 03: Ecological Baseline
Start Date	October 1, 2008
Completion Date	January 31, 2009

Proposal for Data Management Planning to Support EBM Implementation

The EBM Working Group is seeking to provide recommendations to the Land and Resource Forum on a data management system that would provide for efficient and reliable delivery of data and information to support the implementation of EBM into the future. This proposal provides an outline of

- Some of the key challenges associated with data management;
- A workplan to complete recommendations on data management;
- Key deliverables; and
- Budget to complete.

Why set up a data management system?

There are several challenges associated with data management to support EBM implementation. These include:

- Data and information is required to support studies and operational planning in a wide variety of topic areas, including ecological, social, cultural and economic.
- Data is acquired from multiple sources and reflects a variety of proprietary interests and sensitivities. At the moment post-EBMWG there is no confirmed access to licensee forest cover or other data, but it will be essential for implementation.
- There is currently no plan for capturing new information generated from EBM and AM in existing data management systems .
- New data layers are regularly being developed and old data layers updated. It can be a challenge to know if one is working with the most up-to-date set of data and the latest version.

- For any one topic area, there may be a number of different datasets representing different input layers, levels of accuracy and amounts of verification.
- Data and mapping may or may not be accompanied by metadata and reports that describe how the layers were derived, who did the work, and what the inputs and assumptions were.
- EBM Implementation will involve working with data that is acquired from, and used by, a range of organizations of varying technical capabilities and levels of resourcing.
- Timing of data updates are critical to operational and field-based project planning - supporting analysis and planning in the fall/winter in preparation for summer and fall operations, inventory projects and research.

A data management system is needed to ensure that the requisite data is readily accessible to those implementing EBM and that they know what they are working with and have an assurance that the data and information used is reliable and is the best available for the task. Sorting out data can be a time-consuming (and therefore costly) and frustrating task. A data management system is needed to avoid having to repeat the process of data assembly and information gathering over and over again and will ensure that there is consistency in the types and quality of data used.

At a minimum, the following will be required to support long term data needs of EBM implementation:

- A data repository that will be available in the long term with dedicated personnel to manage data and information to ensure that it is optimally accessible to the various parties involved in EBM implementation. For efficiency's sake, it may be useful to have this nested within, or closely associated with, an existing data warehouse e.g., through the provincial government.
- A data management system geared to the needs of EBM implementation that will handle:
 - Incoming new data;
 - Data updates and version control;
 - Removal of old/inappropriate data;
 - Acquisition and use of data having different levels of sensitivity and proprietary interest;
 - Links to metadata and any associated reports that accompany each dataset;
 - Communications with and amongst data providers and to data users, including updates as to what is available;
 - A process for dealing with ongoing requests for data and information.

Workplan

This project will provide recommendations on a data management system for EBM implementation. It will summarize the high level data needs for each category of EBM implementation activity but it will not provide a listing of the actual data layers required.

Questions for consideration include:

- What user groups require data for EBM planning, operations and research? What data and related tools do they need? What level of confidence and quality assurance is acceptable for use under EBM?
- Who are the end users of the data/product developed using the data? What is their technical capacity and what influence does this have on data management needs?
- To what extent are data management needs already addressed in existing structures and where are the gaps? What opportunities are there to build on existing resources for long-term data management? How will this fit with the anticipated structure for EBM implementation?
- What are the main categories of data essential for EBM implementation? What are the main sources of these data and challenges with their acquisition and use?
- What work is required to bring existing data up to standard e.g. data clean-up (some of this has already been documented)

Activities:

- Interviews with EBM WG project personnel to determine high level data needs, seek input into issues and challenges related to data capture, use and storage and seek recommendations for EBM data management over the long term.
- Review of EBMWG reports to identify data management priorities in the short and long term.
- Interviews with data management personnel and data providers (primarily industry, provincial government) with regard to
 - a. data available now; projected for future (i.e. VRI, TEM), and how this might change current product developed in support of EBM;
 - b. challenges re data acquisition, warehousing and sharing; and
 - c. recommendations for data management for EBM implementation (including adaptive management) for the long term (specific reference to “a.” above).
- Discussion with the adaptive management framework team, experimental watersheds team, and HWB baseline team regarding long-term needs re data and data management to ensure consistency with the AM framework.
- A review of information on data management systems, existing data management systems for data needed for EBM implementation, and review of different models of data management (e.g. Northwest data sharing network).
- Preparation of recommendations for data management for EBM implementation, based on all of the above information

Deliverables

The two key deliverables of this project will be

1. A report that summarizes discussions with the various parties and recommends a data management system to support EBM implementation. The goal will be to provide recommendations that effectively respond to the key challenges with regard to data management and that are feasible to implement over the long-term. The report will include
 - a. Recommended delivery mechanism (or options)
 - b. Estimated personnel and funding requirements (may also be multiple options)
2. A spreadsheet that summarizes the high level data requirements for each project area, including where possible information on custodianship, spatial scope, availability of metadata, proprietary/sensitive, and any known data issues/ data clean-up or compilation required.

Budget

Task	Time required	Completion date
1. 2 meetings with data management sub-committee	8	
2. Interviews with up to project personnel, including adaptive management framework team: - develop questions - 0.5 – 1 hr interview - prepare summary of interviews	25	October 31 st , 2008
3. Interviews with 10 data management personnel and data providers: - develop questions - 0.5 – 1 hr interview - prepare summary of interviews	31	October 31 st , 2008
4. Review of information on data management systems	8	
5. Summary of data needs	20	
6. Preparation of draft recommendations report, to be reviewed by the parties listed under “Activities”	30	November 30 th , 2008
7. Preparation of final report to EBM WG	4	December 12 th , 2008
TOTAL	136	

136 hours x \$80/hr = **\$10,880**

Up to \$2,000 for travel expenses.