
MORICE AND LAKES IFPA DATA SHARING NETWORK PROJECT

Introduction

The Data Sharing Network (DSN) project is a northwestern BC initiative involving data exchange amongst the local resource community and government. The Data Sharing Network Project increases data management, exchange and analysis collaboration between the provincial government and the Morice and Lakes IFPA members. The organizations involved include; Canadian Forest Products (Canfor) Houston Division, Pacific Inland Resources Smithers, West Fraser Mills Ltd - Fraser Lakes Sawmills Operation, Babine Forest Products, Houston Forest Products, L&M Lumber Ltd., the Office of the Wet'suwet'en, Skeena Region Ministry of Sustainable Resource Management (MSRM), Lakes/Morice and Bulkley/Cassiar/Kispiox Ministry of Forests (MoF), Ministry of Forests Timber Sales Program and MSRM's Land Resource Data Warehouse (LRDW).

Scope and Objectives

The purpose of this project was to organize Morice and Lakes IFPA licensees, Nadina and Skeena-Stikine Ministry of Forests Districts, BC Timber Supply and the Office of the Wet'suwet'en so that they could coordinate their data management, viewing and exchange with the Government of British Columbia.

The Data Sharing Network Project has three phases:

1. local data administration, completed in March 2003
2. data mapping, completed in March 2004, and
3. data viewing and exchange, completed in March 2005.

Methods

Phase 1 Local Data Administration

Phase 1 was delivered in March 2003. In summary the Local data administrator project had the following objectives:

- Acquire meta data in a format consistent with the MSRM meta data strategy (<http://srmwww.gov.bc.ca/tib/fia/shareddata.htm>).
- Establish accountability and responsibility for each data layer recognizing spatial and temporal changes of the information.
- Determine or establish custodian and stewardship for each data layer, spatial and attribute, following and guided by the MSRM custodial guidelines.
- Help set custodial and stewardship boundaries (eg chart areas for spatial data).
- Help reconcile spatial data overlaps and responsibilities between stakeholders.

Phase 2 Data Mapping

Phase 2 was delivered in March 2004. In summary the objective of the data-mapping was to facilitate the integration of participants' internal data for planning and monitoring in support of Sustainable Forest Management (SFM) planning and data exchange with government. Each

participant's road and block data was modeled and integrated into a common format for exchange with government. The Data Mapping had the following tasks:

- Document stakeholder internal data standards/schemas.
- Document government standards.
- Translate licensee blocks and roads into aggregated data sets in the government standard.

Phase 3 Data Viewing and Exchange

Phase 3 is the focus of this document. The data viewing and exchange objective is to develop local data viewing and exchange facilities based on MSRM's Internet Mapping Framework (IMF) and other tools to assist with the coordination of SFM planning and the exchange of data with government. IMF based web pages were developed to meet DSN participants' data exchange and viewing requirements.

The Exchange and Data Viewing component has the following tasks:

1. Storing exchange data on a data-sharing server. MSRM has identified its LRDW as the data-sharing server. Data on the data-sharing server would provide data to the participants in an acceptable data format.
2. MSRM's Data Review and Distribution (DRAD) project is being set up to "facilitate the secure viewing and exchange of spatial data and project information between government ministries and public partners". Working in conjunction with MSRM's DRAD project and the MOF/MSRM Submission Broker project enable the DSN data to be exchanged with MSRM's LRDW. To facilitate this exchange data will need to be loaded into MSRM's IMF framework so that proponents have a secure method of exchanging their source data with the LRDW. The IMF framework will provide the standard mechanisms and functionality for a proponents data to be loaded into the LRDW.
3. The existing BCeID security model would limit access to the LRDW to the relevant stakeholders, but allow for the assignment of permissions on a temporary basis to facilitate consultation and other business needs. IMF pages would facilitate exchange with the following sources:
 - a. strategic planning information for the Morice LRMP,
 - b. Morice/Lakes IFPA SFM information, and
 - c. 1st nation information covering the Wet'suwet'en's traditional area.
4. Make the aggregate block and road data available to the government's LRDW.

Results

Phase 1 Local Data Administration

Please see the 2003 Data Sharing Network project summary.

Phase 2 Data Mapping

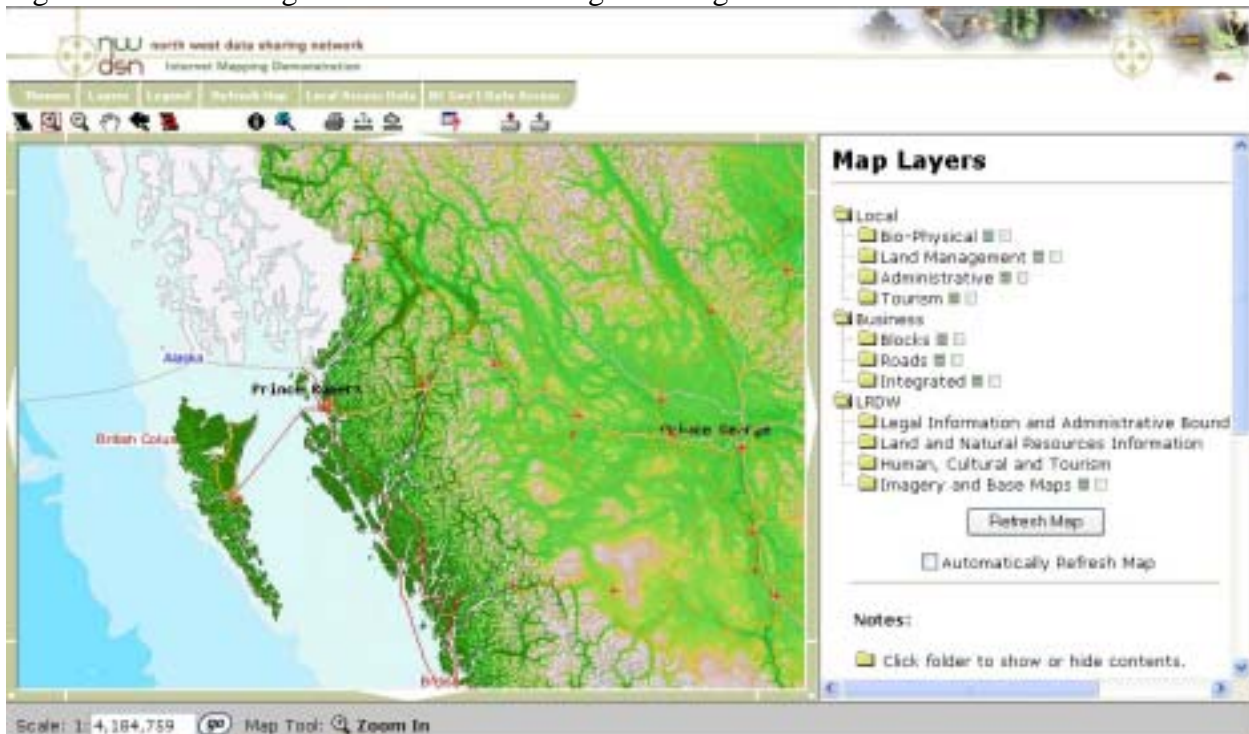
Please see the 2004 Data Sharing Network project summary.

Phase 3 Data Viewing and Exchange

The project has spanned three years having started in 2002. Since the beginning of the project there have been many technological innovations and this project has worked closely with government, First Nations and forest licensees to ensure that the project was able to meet its original intent.

1. Data storage has been organized such that there are pointers to the government corporate data holdings. Under project partner’s BCeID accounts corporate government data can be accessed. Both “Local” and “Business” data are housed on a server at the University of Northern BC (<http://gislab-60.unbc.ca/>). MSRM was to provide hosting services, however their “DRAD” service was retired during the project, please see below.
2. The Data Sharing Network project has worked with MSRM’s Business Solutions Branch to develop a local data management solutions that incorporates MSRM’s business interests. MSRM developed the DRAD service to provide services to projects such as the Data Sharing Network project. The DRAD was retired before phase 3 of the project was started. In response the Data Sharing Network Project developed the data viewing features using MSRM’s “OpenIMF” which allowed for the viewing of both LRDW corporate data that is available through their LRDW Web Map Service (WMS) and the DSN’s Local and Business data through the DSN’s UNBC based Web Map Service (WMS). This provided views of both Government of British Columbia corporate data and of the DSN’s Local and Business data. The map service was developed under contract and is available at: <http://demos.latitudegeo.com/imf-ows/imf.jsp?site=nwdsn>. MSRM has indicated that it will host the OpenIMF web page and discussions to transfer the site to MSRM are ongoing. Hosting the site through MSRM will allow fast access to LRDW data and better integration with MSRM’s data holdings. Figure 1 shows the site.

Figure 1. Data Sharing Network Data Viewing Web Page



3. A data security model has been implemented. All of the data stored through the Data Sharing Network Project is only available to the members of the Morice and Lakes IFPA, Government of British Columbia and the Office of the Wet'suwet'en. Through members BCeID account corporate government data that they have permission to access is available. Local data is available to licensees based on permissions. Local data also honours government data sharing agreements. Temporary permissions are assigned so that the members can facilitate consultation and meet other unanticipated business needs. Through the Northwest Data Sharing Network web page (<http://nwdsn.org>) specific data views are available, such as Morice and Lakes IFPA, Bulkley Timber Supply Area and the Wet'suwet'en.
4. Building on phase 2, "data mapping" a service is available on the web page (<http://demos.latitudegeo.com/imf-ows/imf.jsp?site=nwdsn>) that launches a set of scripts that aggregates Morice and Lakes IFPA block and road coverages then translates them into the appropriate government standard. The service on the site provides the exchange mechanism with government.

Discussion

The Data Sharing Network project has had several challenges and opportunities, the most notable being technological advancements and changes in data management services provided by MSRM. The project has successfully delivered on its original intent. It has enabled improved local data coordination and management. As well, it has advanced the capacity for local data holders to exchange information with government. Through this project there is a higher level of integration of business data, local data and LRDW based corporate government data.

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