Final Progress Report for 03HQAG0134 Clearinghouse Integration
with OpenGIS Services Montana State Library Natural Resource
Information System 11/20/2006

Task 1. Explore and research current technologies for exposing GIS data layers as OpenGIS format map services. This task will provide time to explore and fully research available options for serving data to meet the OpenGIS standards. Currently, NRIS is making use of ESRI's ArcIMS software solution, which can be configured to provide the services necessary. We will conduct additional research, however, to make sure that the option we choose is the best for the application.

Status: Completed August 2005

Jon Nehring, one of the project originators, was contracted to complete the research. His recommendation was to go forward with ESRI's ArcIMS metadata service to meet the OpenGIS standards requirement.

Task 2. Convert existing NRIS clearinghouse metadata records into new software architecture. Based on findings from Task 1, existing metadata records will be ported into the new software system.

Status: Completed March 2006

Jon Nehring was contracted again to implement the ArcIMS service. Unfortunately, the service was not compatible with our SQL Server 2005 environment, so we set up a separate server to implement and test the ArcIMS metadata service. The ArcIMS metadata service was installed, configured and populated with several hundred metadata records from the NRIS GIS data clearinghouse.

Task 3. Based on results from Task 1 and 2, configure, program, test, and debug map services. This task will include the actual programming, configuration, testing, and debugging of the new map services. It will also include addition and testing of map services provided under contract by ITSD.

Status: In Progress March 2006

Extensive testing has been performed and we are satisfied that the ArcIMS metadata service at NRIS will perform as envisioned, providing a single repository for all the metadata in the Montana GIS Data clearinghouse and also supporting Open-GIS compliant map services that can be exposed to the National Map and Geospatial Onestop.

We have not yet implemented this service in our production environment. We are preparing a production server which will host this service along with ESRI's portal software which also requires SQL Server 2000. Both services together will compose the new architecture for