

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
NATIONAL APPLIED RESOURCE SCIENCES CENTER  
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In Reply Refer To:  
9160 (RS-120)P

November 20, 1998

Information Bulletin No. RS-99-025

To: All State Directors,  
Director 200, MIB, Rm 5650,  
Director 300, MIB, Rm 5650,  
Director, NIRMC

From: Director, National Applied Resource Sciences Center

Subject: Automation of the BLM 100k Map Series

We are pleased to announce that after considerable effort, the National Applied Resource Sciences Center (NARSC) has completed the design of a process to automate the production of the BLM 1:100,000 scale administrative map series. The first map (Red Desert Basin, Wyoming) was printed in early November. We appreciate the opportunity to work with the Wyoming State Office's GIS/Mapping Services unit during the preparation of this map. Copies of this automated map are enclosed for your review.

The 100k series continues to be in high demand both internally and with our external customers. When automation is fully implemented, we can expect to increase the rate at which maps can be revised in response to field office and public requests. The 100k series will be automated as revisions are requested, based upon the availability of the BLM Geographic Coordinate Data Base (GCDB) and the loading of that data into ArcInfo.

Production of revised 100k maps will continue to be a partnership between NARSC and the field offices. The automated process is based upon ArcInfo software capabilities. It relies upon the BLM's GCDB which we load into ArcInfo to create the land net. The process also uses 100k digital line graph data (produced by the U.S. Geological Survey in Spatial Data Transfer Standard format) for the hypsography, hydrography, boundary, and transportation data. Processes have been built that automate the text placement. In the future, we intend to utilize the ALMRS data base as a source for much of the ownership data. At present, ownership data is being provided via input from existing data sources. We will continue to rely on BLM field offices to identify recreation sites, special management areas, and ownership changes for the revised maps. At the end of our process, we utilize imagewriter technology to create the final

color separates which are then provided to the printing office

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for the press-run.

Our goal has been to use automated processes and digital data to the maximum extent feasible to produce a professional looking, printed map which includes all of the critical features designed into the existing map series. We feel we have developed a process that allows us to meet this goal.

### Implementation

We will continue to modify and enhance the automated process. We are implementing staff training for these procedures within NARSC and plan to schedule a limited number of automated revisions using these procedures during FY 99. The determining factors in whether we can automate a particular map are:

(1) availability of GCDB coverage, and (2) whether the GCDB data will load cleanly into ArcInfo using the special software that has been developed. If the data loads cleanly, we can move forward with the scheduling of an automated map revision. If we find that the GCDB data won't load as-is, we will relay this information back to the requesting BLM State organization. When the data is modified and loads cleanly, the automated map revision process can begin.

If you are interested in evaluating any 100k maps for possible automated revision this FY, please send the names of the maps to Bill Jackson, NARSC, RS-120, at (303)236-7345. We will quickly evaluate the GCDB data and get back with you concerning our findings. If it turns out that the available GCDB data won't permit us to automate a particular map, keep in mind that we can still produce a revised map for you using traditional production techniques. Because FY 99 is the initial implementation period, we will take on a limited number of automated revisions. We are excited about implementing these new procedures and look forward to working with you.

Please direct any questions concerning the automated 100k process to Chris Smith, NARSC, RS-120 at (303)236-7381.

/s/ Roland L. Barkow

1 Attachment

1-Red Desert Basin revised 100k map (5 copies)

### Distribution

WO-210(Harne/Green)-1 copy 100k map

WO-350(Buhler)-1 copy 100k map

RS-150A, BLM Library

NI-101, Reading File

RS-120:FBatson:ps:11/19/98:6-0979:h:\home\pswift\auto100k.mem