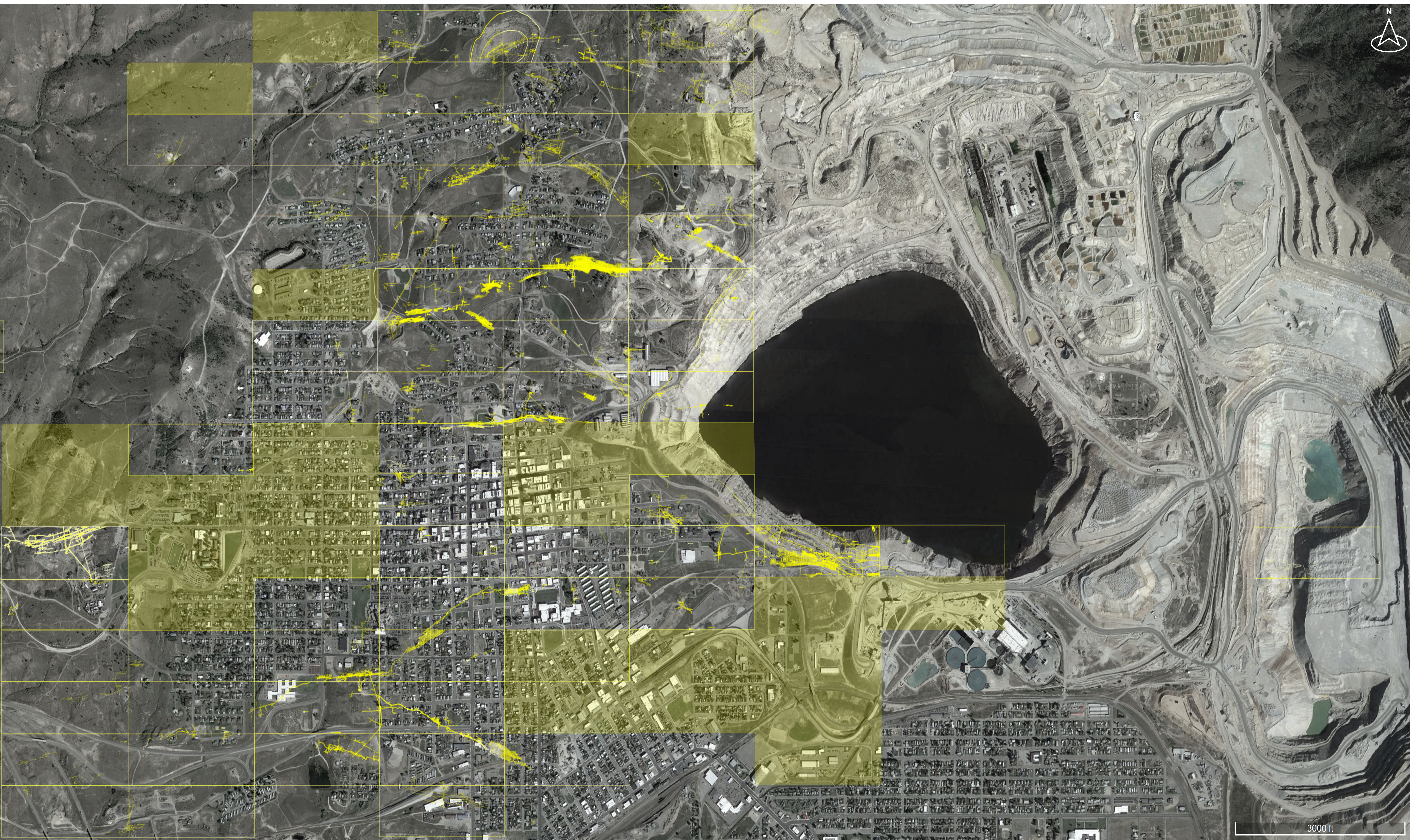


DIGITAL MAPPING TECHNIQUES 2025

The following was presented at DMT'25
May 18 - 21, 2025

The contents of this document are provisional

See Presentations and Proceedings
from the DMT Meetings (1997-2025)
<http://ngmdb.usgs.gov/info/dmt/>



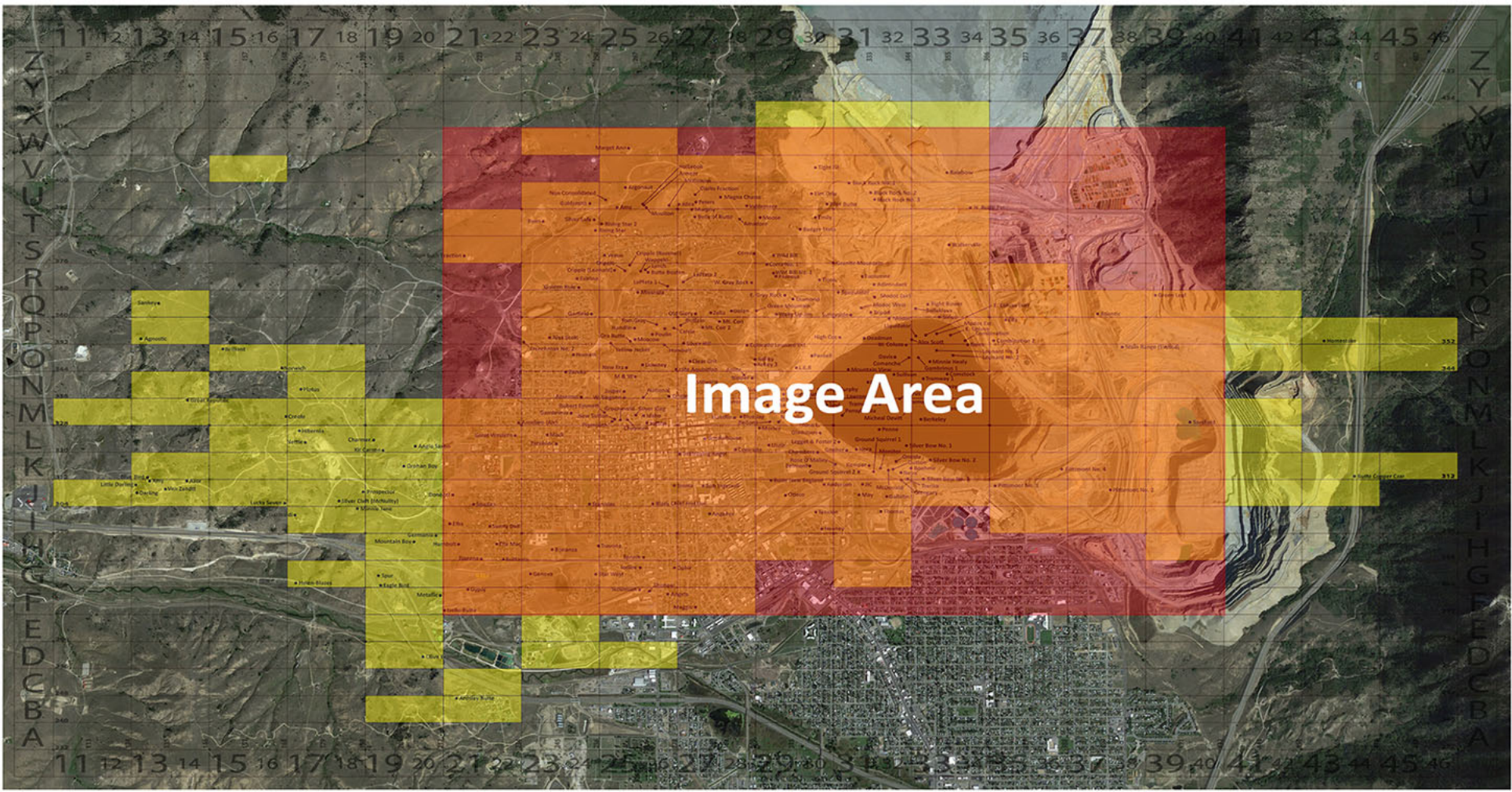
Completed Areas for Subsidence from the Butte Stope Books

The Anaconda Mining Company Stope Books are a unique part of Butte, Montana's mining heritage. The books hold most of the underground mine workings information which includes adits, drifts, stopes, tunnels, cross-cuts, manways, timber sets, and survey points. The workings inside of the books date from pre-1887 to 1982. Even though underground mining ceased in Butte after 1975, there is underground mapping as late as 1987 due to exploration work conducted by the New Butte Mining Company. There are a total of 353 stope books in the collection which are currently held by Montana Resources, the Butte Silver-Bow Public Archives and the New Butte Mining Company.

Each stope book footprint represents 40.4 acres of surface area and shows all the workings within that footprint. Each page represents a change in elevation towards sea level of 6.64' from the collar of the mine unless otherwise noted in the workings. The total amount of surface covered by the books is 12.14 square miles.

The books are currently being scanned by the Montana Bureau of Mines and Geology's Data Preservation Department so that the collection can be saved from possible destruction and preserved in digital format.

Over the past five years, several entities have expressed interest in the stope books. These entities include the county of Butte Silver-Bow due to subsidence issues within 200 feet of surface (shown), Blackjack Silver Corporation, and Dr. Keith Russ who is currently using the books to create a three dimensional model of the Butte Mines.



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DMT 2025

