



**FIGURE 3
 FAULTED BEDROCK AND SURFACE TOPOGRAPHY
 VICINITY OF PROPOSED NORTHSHORE MINING EXPANSION
 ST. LOUIS COUNTY, MINNESOTA**

data sources

^a Severson, M.J., and Miller, J.D., Jr., 1999, Bedrock geology of the Allen quadrangle, St. Louis County, Minnesota: Minnesota Geological Survey Miscellaneous Map Series M-091, scale 1:24,000.
 Miller, J.D., Jr., and Severson, M.J., 2005, Bedrock geology of the Babbitt quadrangle, St. Louis and Lake counties, Minnesota: Minnesota Geological Survey Miscellaneous Map Series M-159, scale 1:24,000.
 Miller, J.D., Jr., and Severson, M.J., 2005, Bedrock geology of the Babbitt northeast quadrangle, St. Louis and Lake counties, Minnesota: Minnesota Geological Survey Miscellaneous Map Series M-160, scale 1:24,000.
 Miller, J.D., Jr., and Severson, M.J., 2005, Bedrock geology of the Babbitt southwest quadrangle, St. Louis County, Minnesota: Minnesota Geological Survey Miscellaneous Map Series, M-161, scale, 1:24,000.
 Miller, J.D., Jr., and Severson, M.J., 2005, Bedrock geology of the Babbitt southeast quadrangle, St. Louis and Lake Counties, Minnesota: Minnesota Geological Survey Miscellaneous Map Series M-162, scale 1:24,000.
^b Jirsa, M.A., Chandler, V.W., and Lively, R.S., 2005, Bedrock geology of the Mesabi Range: Minnesota Geological Survey Miscellaneous Map Series M-163, scale 1:100,000.
^c Jirsa, M.A., Boerboom, T.J., Chandler, V.W., Mossler, J.H., Runkel, A.C., and Setterholm, D.R., 2011, Bedrock geologic map of Minnesota: Minnesota Geological Survey State Map Series S-21, scale 1:500,000.
 Background LiDAR topography images from Minnesota Geospatial Information Office. Proposed stockpile location and mine expansion area from EAW prepared for expansion 9-2-14