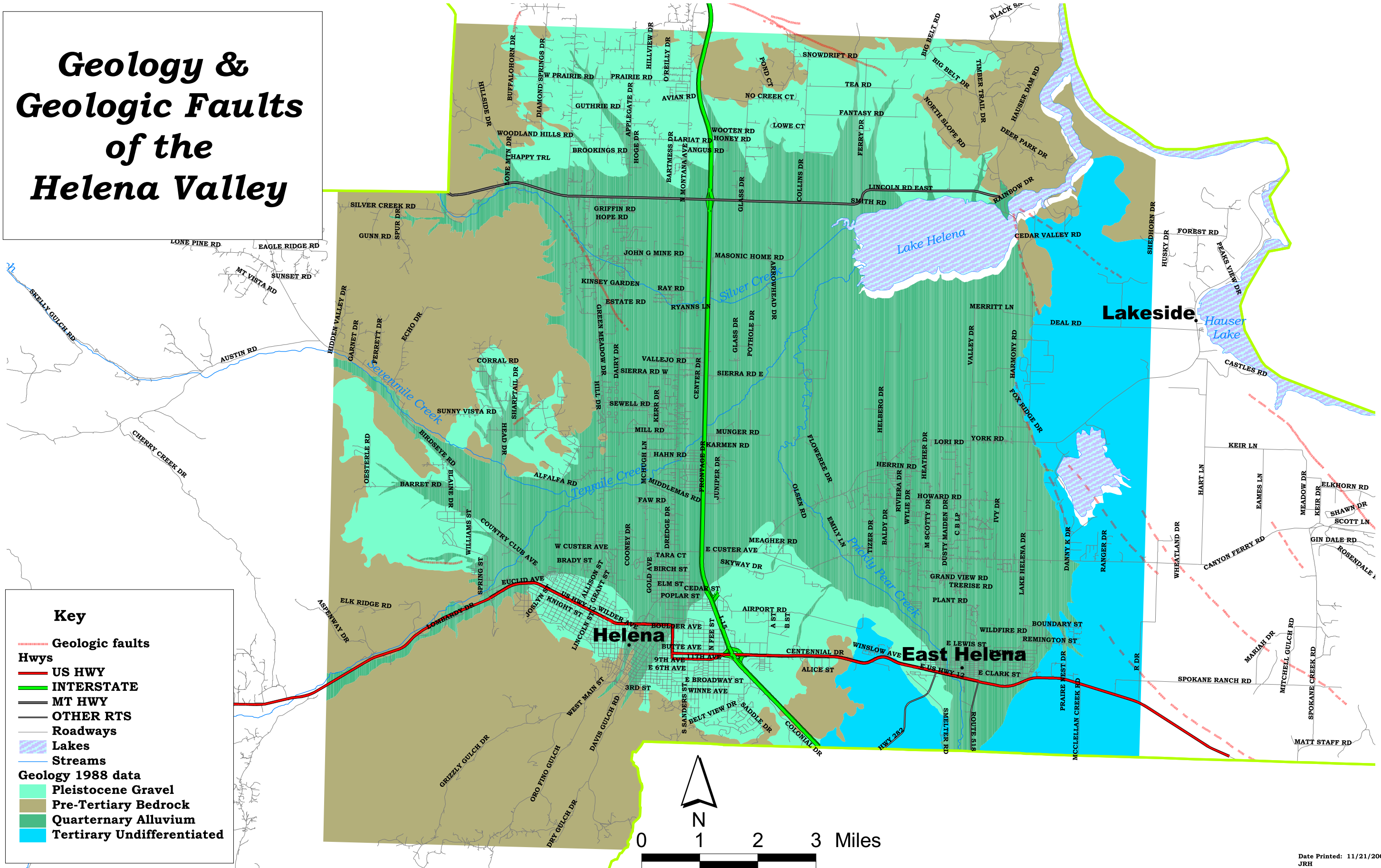


The project site exhibits no known natural hazards that would affect the development of the subdivision.

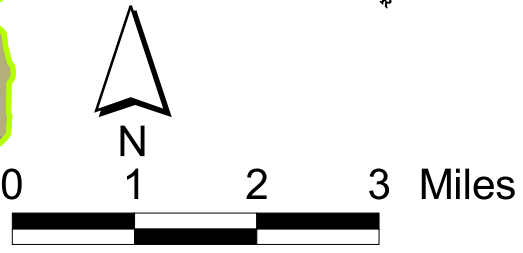
- 1) There are no known geological hazards such as rock outcroppings, cliffs, drop offs, or faults located on the property. WWC Engineering provided the site survey for the parcel and as part of the survey and site inspection no rock outcroppings, cliffs, drop offs, or faults are located on the subject property. We have provided two exhibits within this section that show the geological faults and geology of the Helena Valley as well as the hazards of the Helena Valley. These maps do not identify any hazards present on the subject property. A map is provided in this section that shows liquefaction for the Helena Valley. The project site is located in an area of very low susceptibility to liquefaction. Further, Figure 7.05 of the City of Helena Growth Policy shows the subject property has moderate to low susceptibility to liquefaction. The subject property is not located within the delineated flood hazard area.
- 2) Included in this section is a Hazards of the Helena Valley map. This map shows fuel hazard ratings for the Helena Valley. The map indicates that the subject property is located in an area of low fuel hazard rating. Further, Figure 7.06 of the City of Helena Growth Policy shows the subject property in an area of moderate wildfire hazard. Therefore, the project site is located in a moderate fire risk area not a high hazard fire risk area.
- 3) Based on WWC Engineering site inspection, there are no waterways, ditches, or canals located on or adjacent to the proposed subdivision. There are two drainages that are located on the subject property. Section 3.02 of the Environmental Assessment classifies these drainages as ephemeral drainages that only contain water during high rainfall events or during snow melt. These are not classified as perennial or intermittent streams.
- 4) Based on WWC Engineering site inspection, there are no toxic or hazardous waste storage or disposal areas on or adjacent to the proposed subdivision.
- 5) Based on WWC Engineering site inspection, there is no mining activity or evidence of past mining activity on the project site.
- 6) There are no high-voltage power lines located on the project site. There are no high-pressure gas mains on the site. There is an existing Northwestern Energy gas transmission main located on the property, shown on the preliminary plat. This main will be relocated with the development so that it is located within the proposed street rights-of-way.
- 7) Based on WWC engineering site inspection, there is no evidence of soil contamination on the site or past uses of the site that may indicate soil contamination.

Geology & Geologic Faults of the Helena Valley

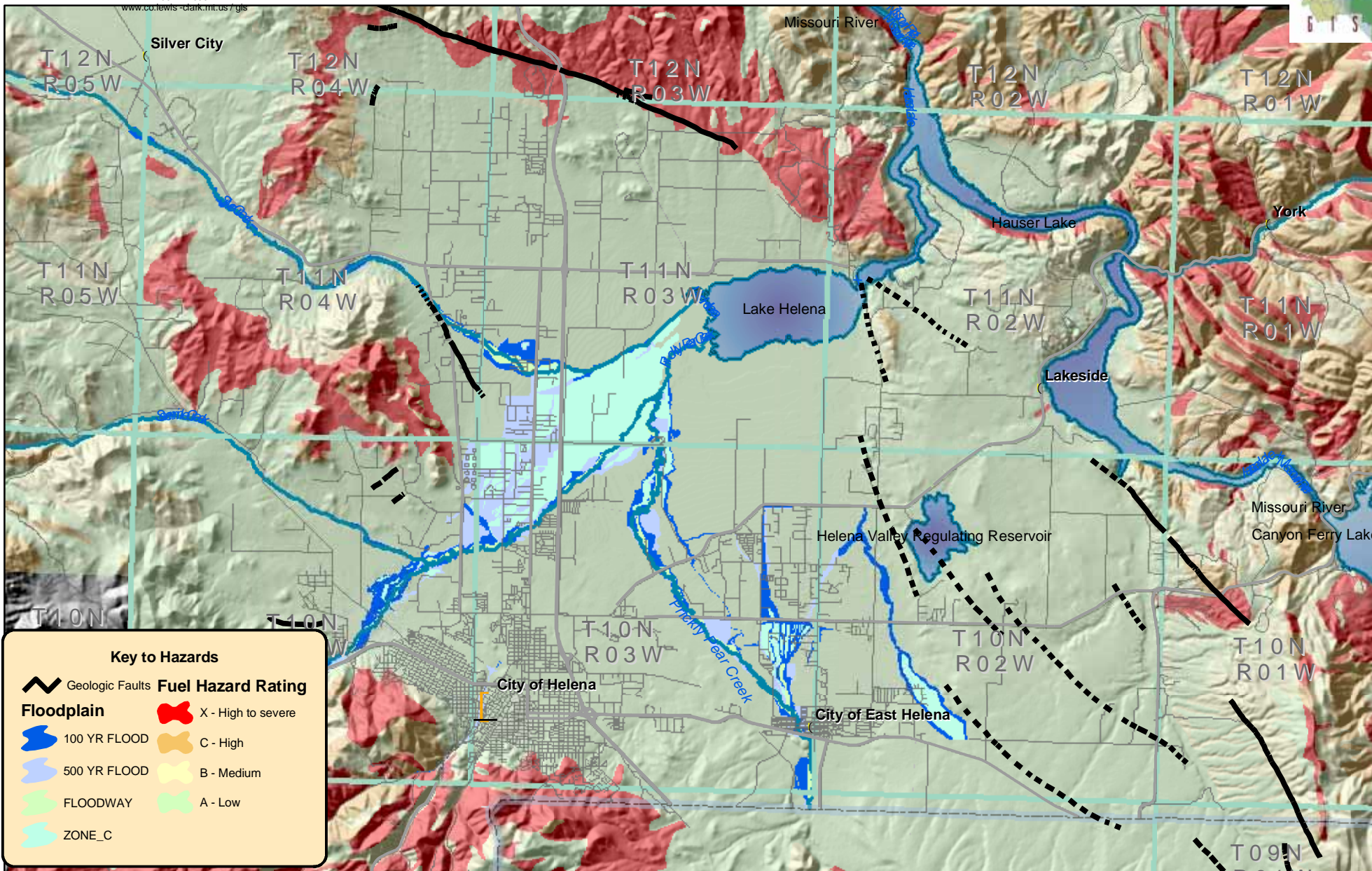


Key

- Geologic faults
- Hwys**
- US HWY
- INTERSTATE
- MT HWY
- OTHER RTS
- Roadways
- Lakes
- Streams
- Geology 1988 data**
- Pleistocene Gravel
- Pre-Tertiary Bedrock
- Quaternary Alluvium
- Tertiary Undifferentiated



Hazards of the Helena Valley Area 2004



Key to Hazards

Geologic Faults	Fuel Hazard Rating
Floodplain	X - High to severe
100 YR FLOOD	C - High
500 YR FLOOD	B - Medium
FLOODWAY	A - Low
ZONE_C	

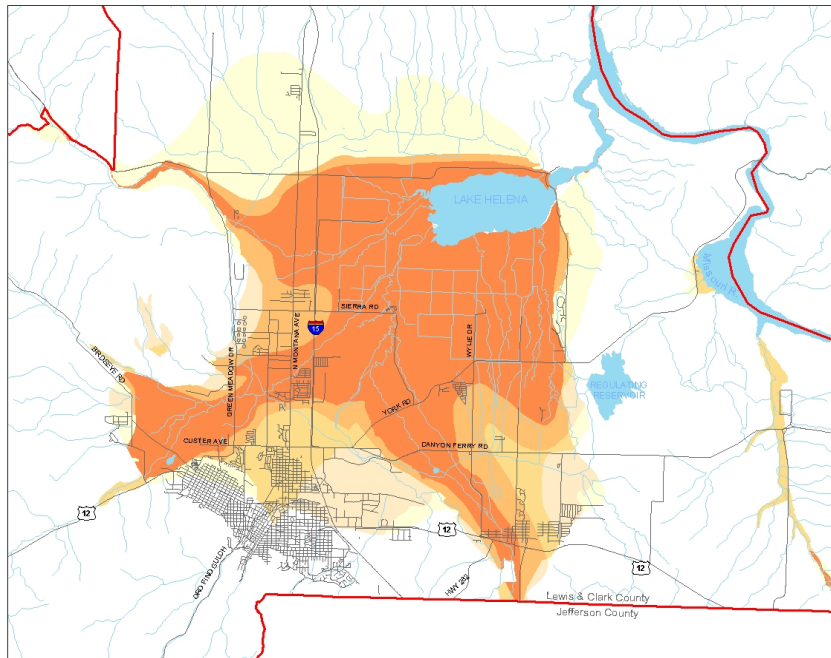
IMPORTANT These data are NOT the official record ***IMPORTANT***
 The data contained on this map are NOT the official records and
 may be inaccurate and incomplete!

Original and official copies of deeds, surveys, plats and ownership information, are available at the Lewis & Clark County Clerk and Recorder office. By using this GIS information, the user acknowledges and accepts full responsibility for verifying the correctness and the completeness of any of the information provided here.

The City of Helena and Lewis & Clark County do not warrant, either explicit or implied, the completeness or accuracy of the information provided. Additionally, the city and county accept no liability of any kind, including but not limited to any losses or damages that may result from the wrongful reliance on this information, and the user also accepts full responsibility for any subsequent use or reuse of the data, and shall be solely responsible for results or any damages which may result from the use of any of these data.

This map does not necessarily depict road ownership or maintenance, either public or private. Nor, does it necessarily depict all roadways in the county.

The data shown on this map were derived from various sources at different scales for a variety of purposes, and there is great variability in the spatial accuracy of the different data sets. Therefore, there may be some mis-alignment between data sets and layers.



GROUND FAILURE Liquefaction Susceptibility

HAZUS

Helena Area HAZUS Analysis Project
Lewis & Clark County, Montana

Map No. ____

Liquefaction susceptibility is derived from soil types and depth to groundwater. Five soil type classes are defined by the National Earthquake Hazard Reduction Program (NEHRP) and are based on soil potential to amplify ground shaking during an earthquake.

LEGEND

Susceptibility Level

- None
- Very Low
- Low
- Moderate
- High
- Very High
- Study Boundary

DATA SOURCE

L&C County GIS Center
Road, Study Boundary,
Water, Shaded Relief
FEMA:
Liquefaction Susceptibility

DISCLAIMER

Results shown here are provided without warranty of being complete or correct. Data components used for analysis were compiled by the Helena Area HAZUS Analysis Project for evaluation purposes only.

67.02, 102



Scale: 1 inch equals 2 miles



Map 12. Liquefaction Susceptibility of Area Soils to Ground Shaking