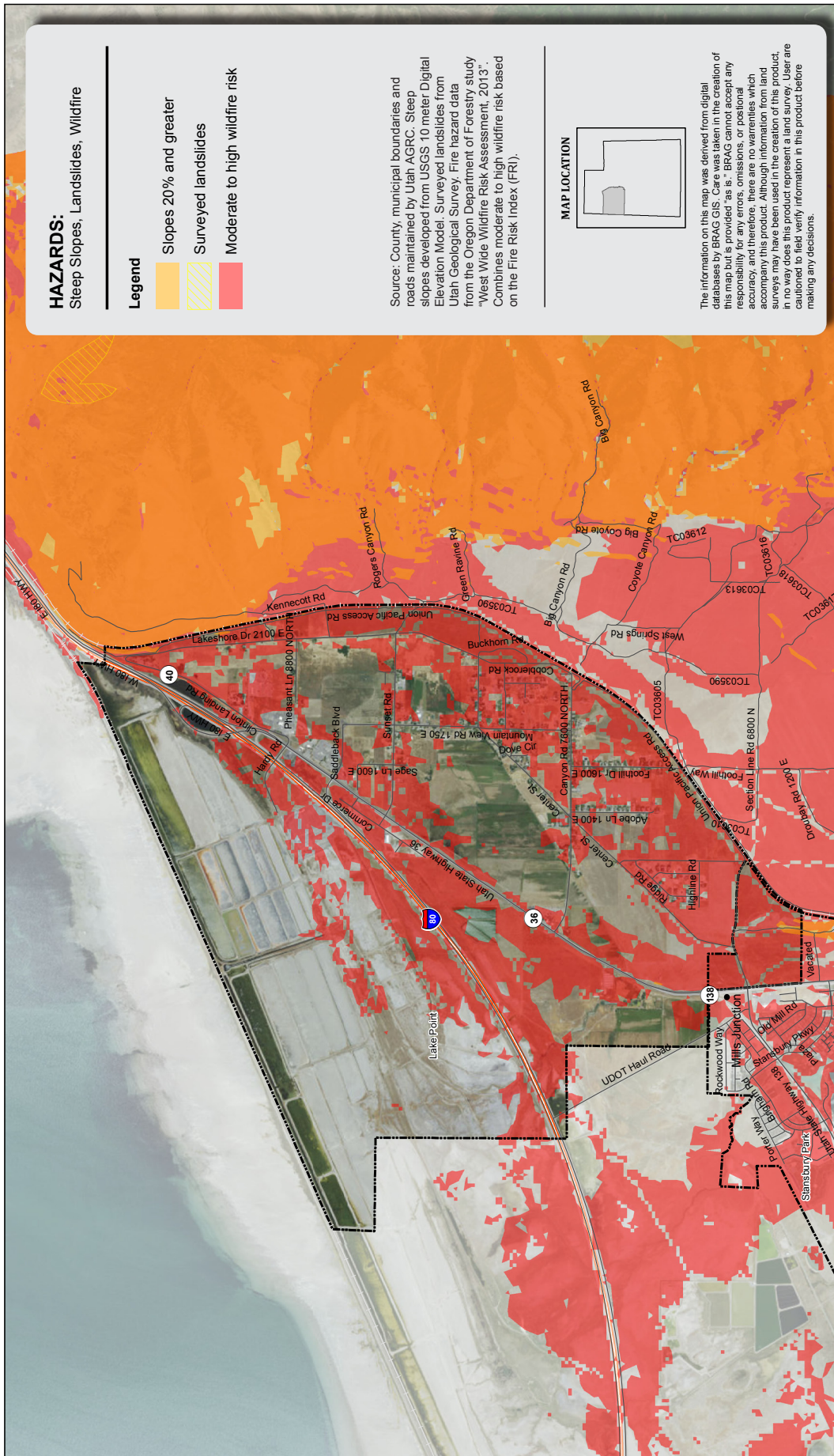
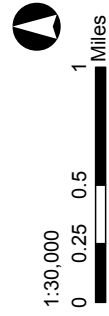
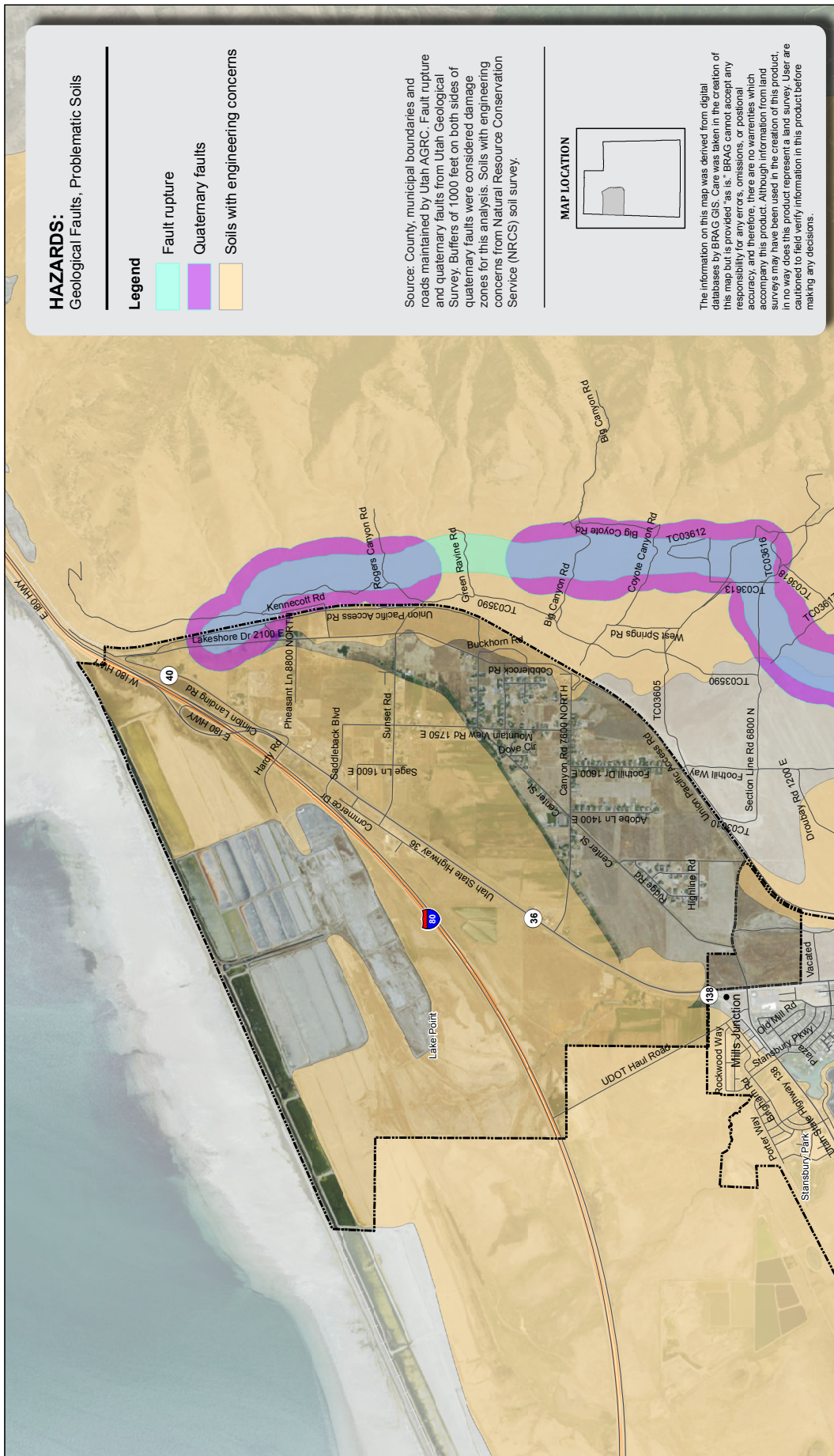


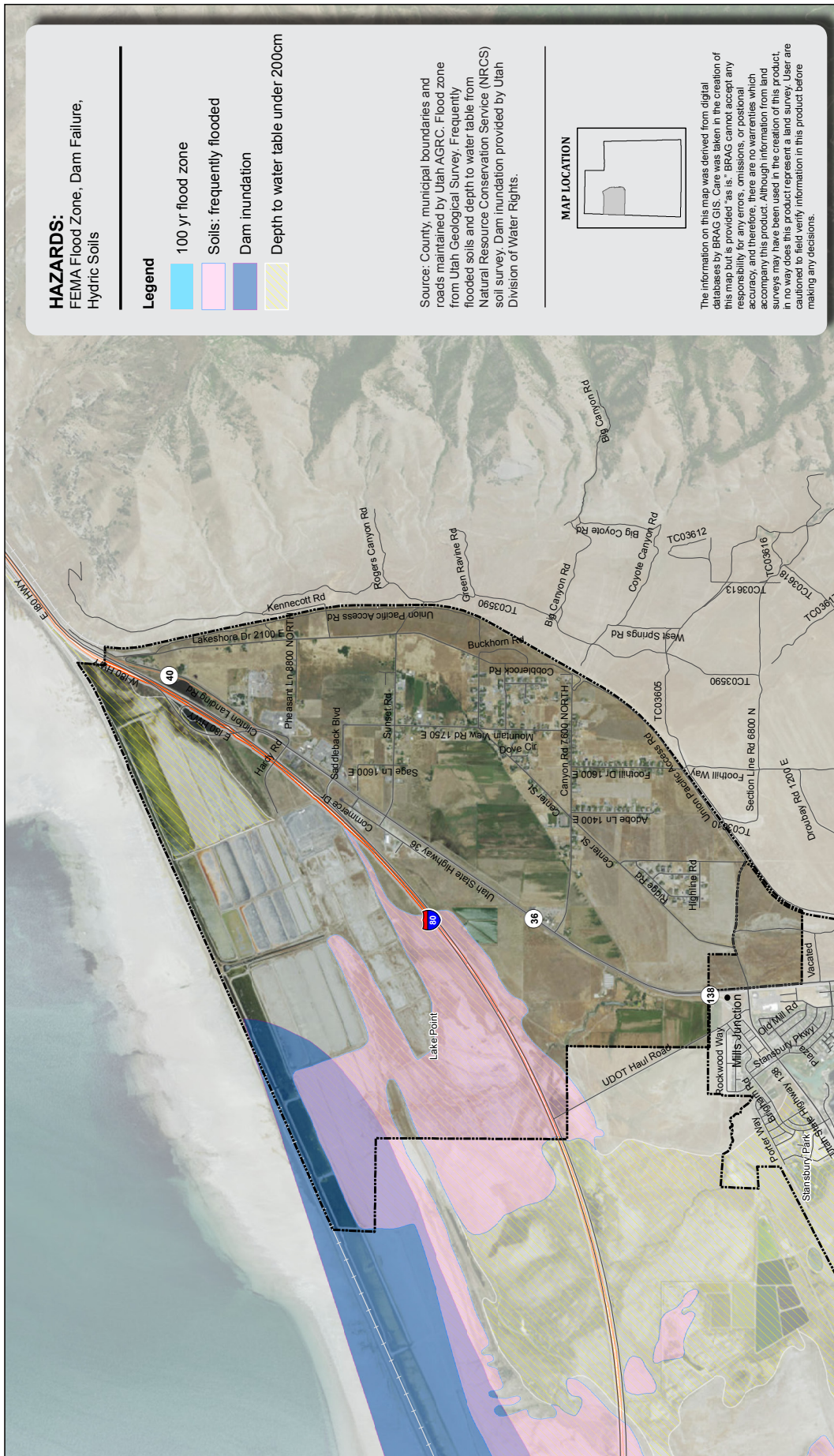
SECTION 9: LAKE POINT COMMUNITY RISK ASSESSMENT



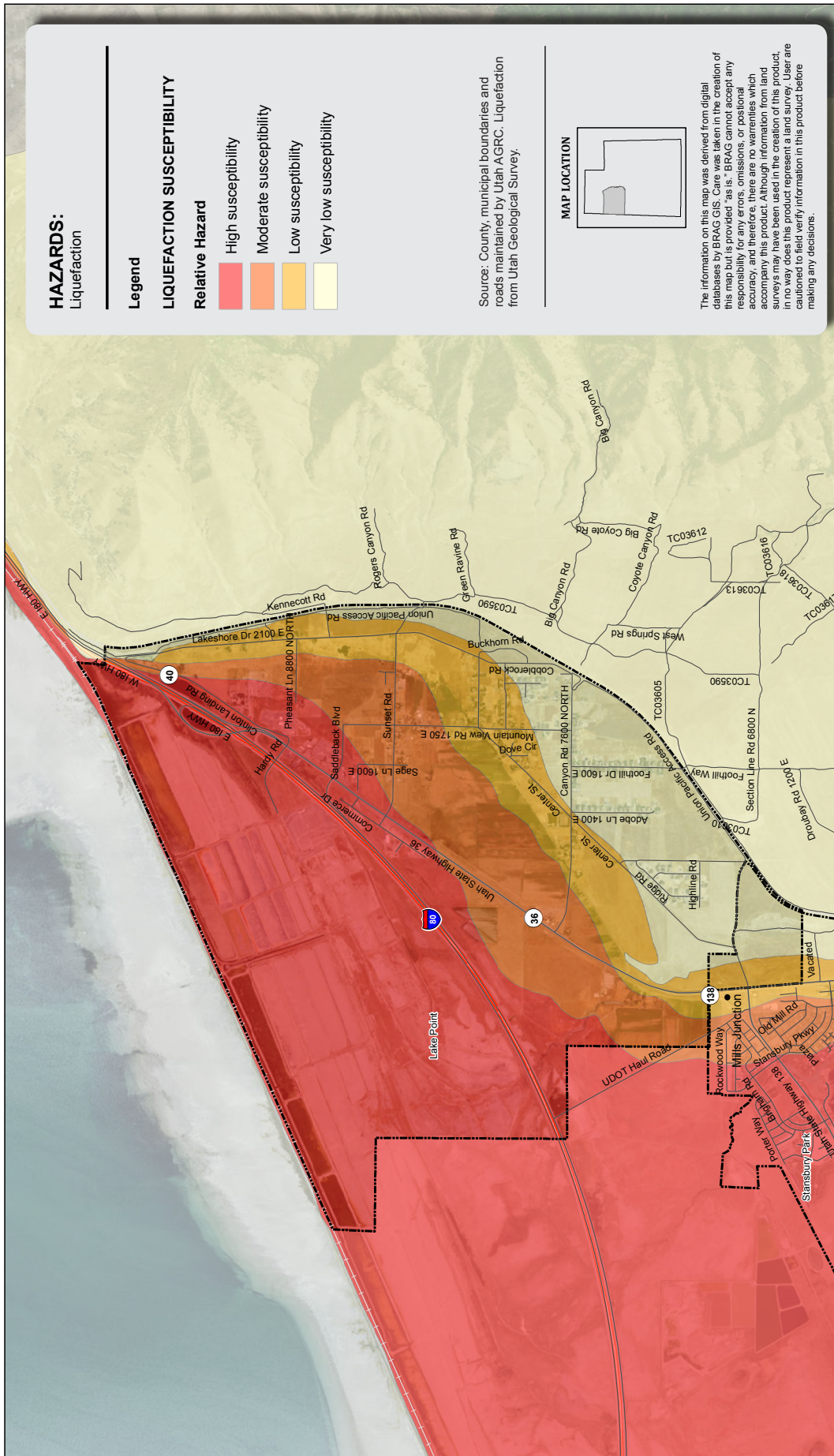
LAKE POINT, UTAH



LAKE POINT, UTAH



LAKE POINT, UTAH



LAKE POINT, UTAH

LAKE POINT NATURAL HAZARDS, POTENTIAL LOSSES, AND MITIGATION STRATEGIES

See the following tables for more detailed descriptions of potential losses associated with each natural hazard in Lake Point.

LAKE POINT

Analysis of hazard risk involving the community of Lake Point revealed that there is potential risks resulting from **dam failure, geologic faults, wildfire, flooded soils, liquefaction, high water table and steep slopes**. These hazards have varying potential to impact human life, property, infrastructure, environmental, recreational, and agricultural features within the community boundaries. Lake Point is located directly adjacent to the southern rim of the Great Salt Lake. Currently, earthquakes resulting in liquefaction, as well as wildfires have the greatest potential to impact human life, property, infrastructure, and agricultural features based on potential loss values. Other natural hazard types not mentioned were found to have no potential impacts to Lake Point.

Natural Hazards

Dam failure. Lake Point has risk to dam failure involving The Great Salt Lake and would be heavily impacted in such an event. Features most at risk are infrastructure, which include the railroads and canals on the north west side of the community. There are associated risks to infrastructure and environmental amenities in the event of dam inundation.

Faults. Lake Point has high risk of fault damage. The community is situated along a quaternary fault as well as being located near faults on the eastern foothills. The eastern portions of the community, especially areas of the foothills and bench, lie along portions of this quaternary fault. Infrastructure, recreational, and agricultural amenities in the fault zone could suffer damage in the event of a large earthquake.

Wildfire. Lake Point has some wildfire risk

Table 24: Lake Point Potential Loss Figures

Lake Point, UT, Residential & Commercial Development at Risk						
Hazard Type	~Residents at Risk*	Residential Units at Risk		Commercial Units at Risk		
		# Units	\$ Value**	# Units	\$ Value**	\$ Potential Revenue Loss***
Dam Failure	0	0	\$0	0	\$0	\$0
Faults	48	15	\$2,286,504	2	\$157,660	\$1,284,522
Wildfire	1,223	368	\$99,045,372	48	\$54,238,062	\$30,828,528
Flood (FEMA)	0	0	\$0	0	\$0	\$0
Flood (Soils)	0	0	\$0	1	\$1,220,246	\$642,261
Liquefaction	180	54	\$10,902,772	50	\$55,739,792	\$32,113,050
Landslide	0	0	\$0	0	\$0	\$0
Slope	3	1	\$245,557	0	\$0	\$0
High Water Table	0	0	\$0	2	\$785,410	\$1,284,522
Unsuitable Soils for Buildings	269	84	\$9,035,386	48	\$35,219,658	\$30,828,528

* Based on average persons per owner household for Tooele County from 2013 American Community Survey, which is 3.2.

** Current Market Value per parcel, including building and land values. Data provided by Tooele County.

*** Based on average sales, receipts, or value of shipments of firms with or without paid employees, per firm (\$642,261 per firm). Derived from 2007 Survey of Business Owners for Tooele County, US Census Bureau.

Lake Point, UT, Critical Facilities at Risk						
Hazard Type	Critical Facilities Types					
	Emergency Services/Law Enforcement	Schools/Public Facilities	Health Care Facilities	Places of Worship	Infrastructure	Other
Dam Failure	0	0	0	0	0	0
Faults	0	0	0	0	0	0
Wildfire	1 EMS Building, 1 Fire Station	0	0	2 Churches	2 Broadband Anchors	1 Water Storage Facility, 1 Solid Waste/Oil Facility, 1 Well
Flood (FEMA)						
Flood (Soils)	0	0	0	0	0	0
Liquefaction	1 EMS Building, 1 Fire Station	0	0	1 Church	1 Broadband Anchor	2 Water Storage Facilities, 1 Solid Waste/Oil Facility
Landslide	0	0	0	0	0	0
Slope	0	0	0	0	0	0
High Water Table	0	0	0	0	0	0
Unsuitable Soils for Buildings	0	0	0	0	0	1 Solid Waste Facility

Note: Critical facilities were identified using multiple data sources including: Utah AGRC, UDOT, Utah Division of Water Resources, and public and community leader input.

Lake Point, UT, Infrastructure at Risk										
Hazard Type	Infrastructure at Risk									
	Railroad Lines		Natural Gas Lines		Electrical Power lines		Roads		Canals	
	# of Miles	\$ Value ¹	# of Miles	\$ Value ²	# of Miles	\$ Value ³	# of Miles	\$ Value ⁴	# of Miles	\$ Value ⁵
Dam Failure	1.17	\$1,755,000	0	\$0	0	\$0	0	\$0	0.56	\$840,000
Faults	0	\$0	0	\$0	0	\$0	1.84	\$966,000	0.003	\$4,500
Wildfire	0.58	\$870,000	2.32	\$3,248,000	1.5	\$190,500	13.08	\$6,867,000	6.65	\$9,975,000
Flood (FIRM)	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Flood (Soils)	0	\$0	0	\$0	0.74	\$93,980	2.86	\$1,501,500	6.09	\$9,135,000
Liquefaction	3.34	\$5,010,000	0	\$0	1.72	\$218,440	0	\$0	0	\$0
Landslide	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Slope	0	\$0	0	\$0	0	\$0	0.23	\$120,750	0.01	\$15,000
High Water Table	0	\$0	0	\$0	0.74	\$93,980	3.29	\$1,727,250	13.7	\$20,550,000
Unsuitable Soils for Buildings	0.51	\$765,000	1.8	\$2,520,000	1.8	\$228,600	22.9	\$12,022,500	27.27	\$40,905,000

¹ Based on figures from 2009 Pre-Disaster Mitigation Plan for Bear River Region, Utah (\$1,500,000/mi).
² Based on average replacement cost estimates for gas lines ranging from 2-inches-20 inches in diameter. These cost are based solely on labor and material costs, and may vary based on time, scope, and site specific variations (Questar, 2015).
³ Based on estimates from Logan Light and Power, 2015 (\$127,000/mi).
⁴ Based on estimates derived from an average 28' wide, 4" thick asphalt county road with gravel subgrade replacement. Cache County, 2015 (\$525,000/mi).
⁵ Based recent Cache County and regional project cost estimates, 2015 (\$1,500,000/mi).

Lake Point, UT, Environmental & Recreational Features at Risk							
Hazard Type	Environmental Features at Risk			Recreational Features at Risk			
	Wetland/ riparian	Lakes	Streams	Parks	Trails	Trails (Master)	Amenities
	# of Acres		# of Miles	# of Acres	# of Miles	# of Miles	# of Amenities
Dam Failure	0.00	282.44	1.02	0.00	0.00	0.00	0
Faults	0.00	0.00	0.39	0.00	0.00	0.38	0
Wildfire	71.41	0.00	0.00	0.00	0.00	3.03	0
Flood (FIRM)	0.00	0.00	0.00	0.00	0.00	0.00	0
Flood (Soils)	3.49	545.60	6.55	0.00	0.00	0.00	0
Liquefaction	1,356.76	728.58	0.00	0.00	0.00	0.00	0
Landslide	0.00	0.00	0.00	0.00	0.00	0.00	0
Slope	0.05	0.00	0.00	0.00	0.00	0.11	0
High Water Table	632.97	159.79	7.30	0.00	0.00	0.00	0
Unsuitable Soils for Buildings	787.35	167.75	14.81	0.00	0.00	0.00	0

Note: Total acres of land and miles of streams and trails were identified using multiple data sources including: Utah AGRC, U.S. Fish and Wildlife Service, U.S. Forest Service, U.S. Geological Survey, Utah Division of Water Resources, and public and community leader input.

Lake Point, UT, Agricultural Features at Risk		
Hazard Type	Lands at Risk	
	Agriculture Production*	Grazing**
	# of Acres	
Dam Failure	0.00	0.00
Faults	13.54	0.00
Wildfire	1,272.57	0.00
Flood (FIRM)	0.00	0.00
Flood (Soils)	238.49	0.00
Liquefaction	1,202.89	0.00
Landslide	0.00	0.00
Slope	5.42	0.00
High Water Table	0.00	0.00
Unsuitable Soils for Buildings	0.00	0.00

* Lands that are currently associated with agricultural activities involving water related land use, as described in the 2007 Utah Division of Water Resources, *Water Related Land Use* dataset.
 **Lands currently associated with grazing allotments identified as part of the Grazing Improvement Program (Utah AGRC, 2012)

in the central and southern sections of town. Most of this risk is likely due to urban forest canopy density and proximity to the major population centers in town.

Flood. On the western and eastern side of Lake Points municipal area, there are frequently flooded soils and a high water table. However, most of these areas seem to be in agricultural areas, and generally do not seem to effect homes and businesses.

High Water Table. Most high water table areas are north of I-80 in agricultural lands and the Great Salt Lake floodplain.

Liquefaction. High liquefaction zones cover more than half of town, mostly north of I-80. Moderate susceptibility areas surround Highway 36, and low and very low susceptibility covers the southern edge of town. Overall, there is a substantial risk to Lake Point from liquefaction if there is an earthquake. Historical lakebed soils and potentially saturated conditions enhance liquefaction risk.

Future Development

Currently, there is a proposed development of around 1,000 homes on the east side of Erda between Lake Point and Pine Canyon. These homes could potentially be affected by wildfire, landslides, and geologic hazards.

Hazard Mitigation Strategies

(See Section 17: Unincorporated Tooele County Community Risk Assessment)