

DEAD RIVER FLOOD

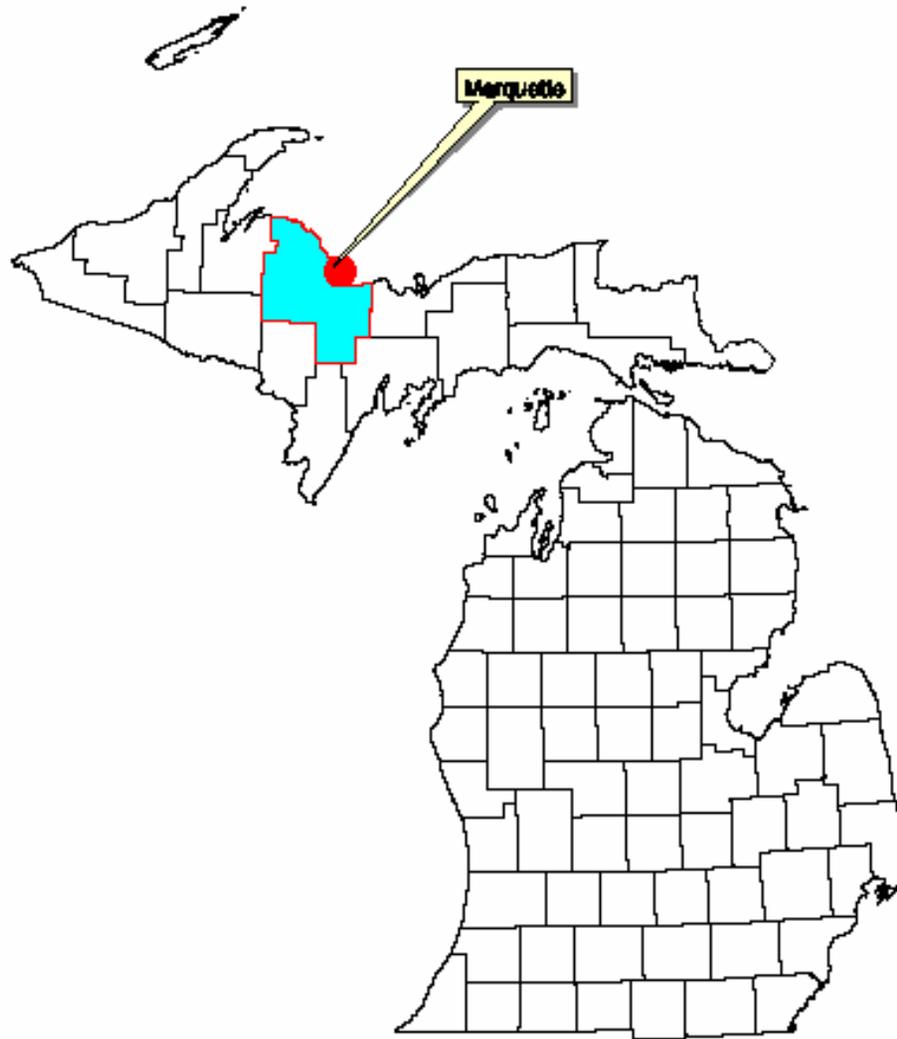
Marquette County, MI



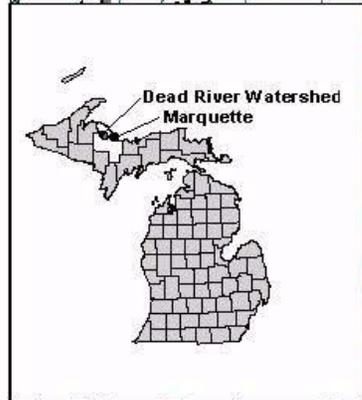
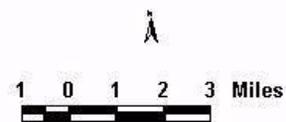
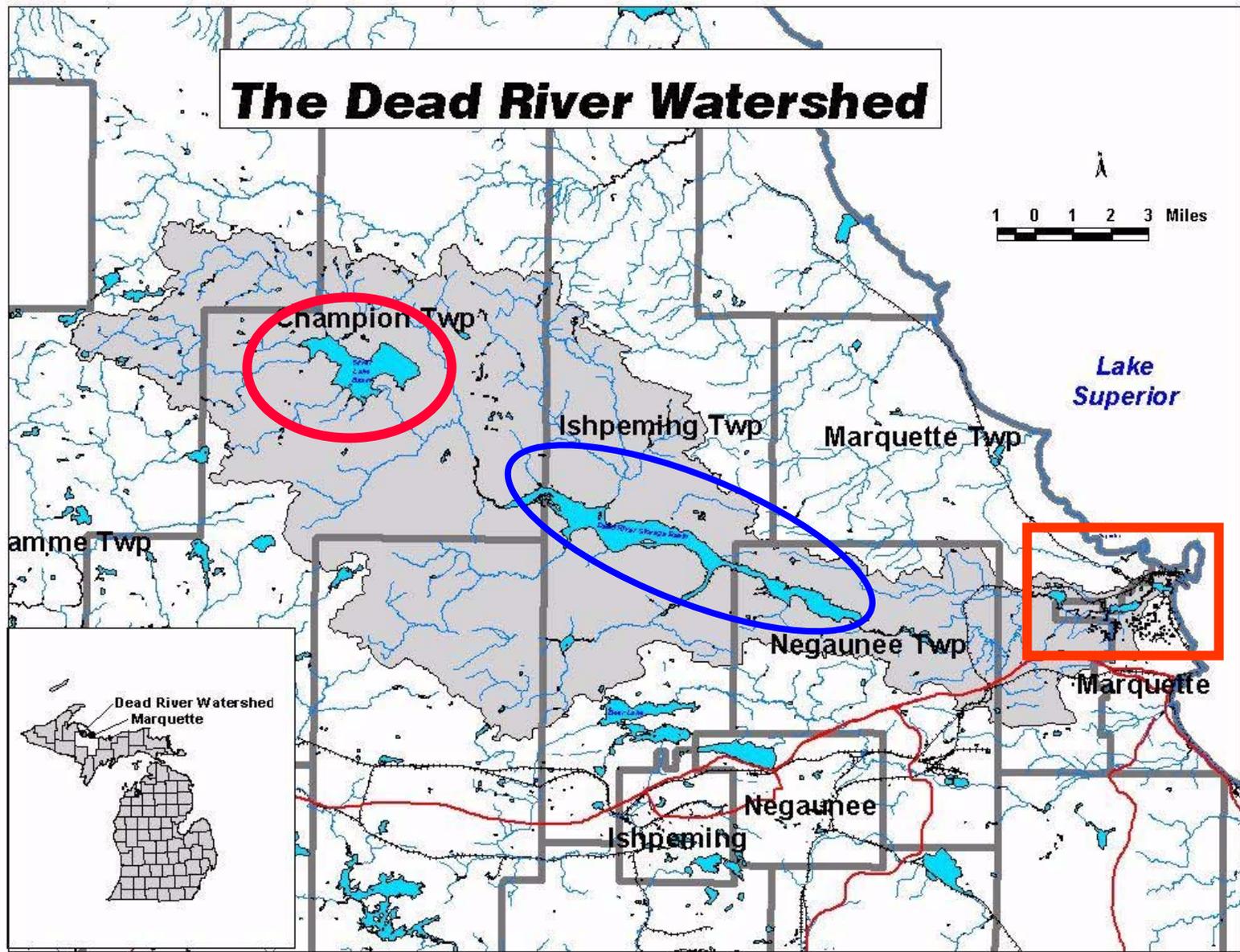
Original Presentation by Brent Nault
Marquette County

Adapted by Jim Hayes,
Michigan Department of Environmental Quality

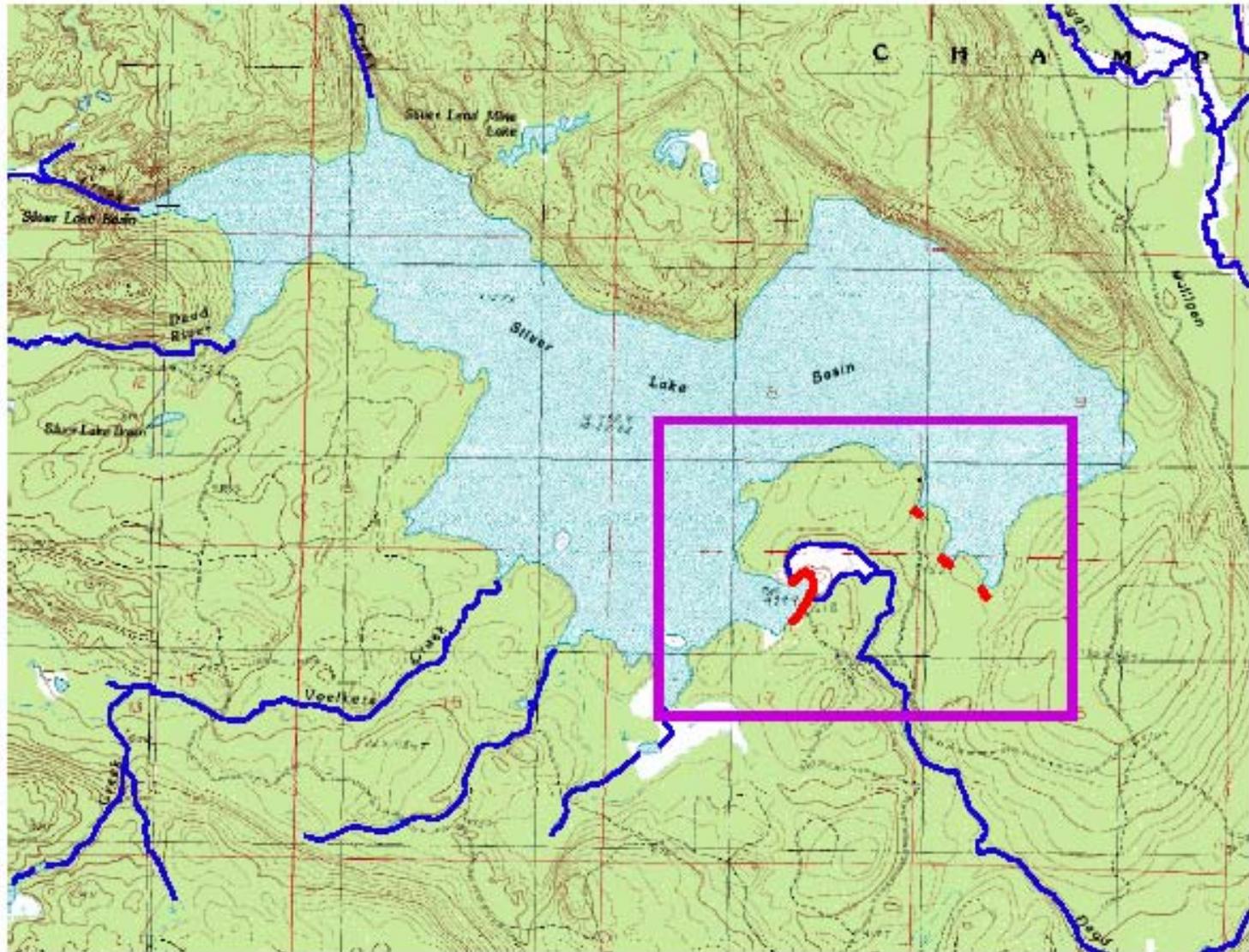
Marquette, Michigan



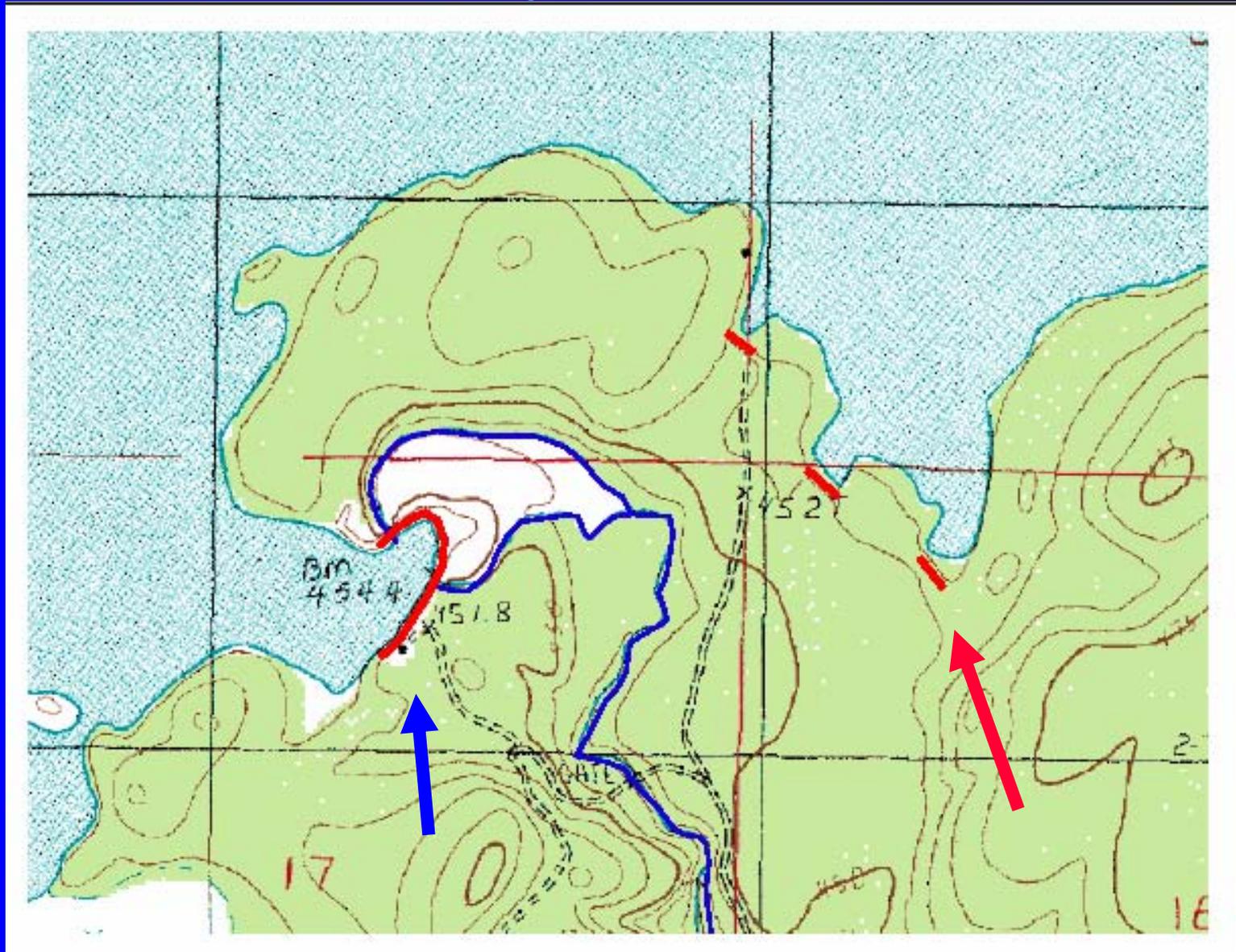
The Dead River Watershed



Silver Lake Basin



Silver Lake Basin Dam



Dead River Flood



- May 14, 2003
- Silver Lake Basin earthen dike bursts – approx. 5:00 p.m.
- 8:44 p.m. Flash Flood Warning Issued

Silver Lake Basin Breach

Dead River Flood



- Break unleashes an estimated 8 billion gallons of water downriver.
- May 15, 2003
- Mqt County Board Chair Gerald Corkin declares State of Emergency at 1:30 a.m.

Downriver from Silver Lake

Dead River Flood



- The torrent of water destroys roads in its path.

Dead River Basin

Dead River Flood



- Floodwaters reach Dead River Basin – damaging camps and homes

Dead River Basin

Dead River Flood



- Floodwaters crest the Hoist Dam and flow further downriver

Hoist Dam

Dead River Flood



Hoist Dam

Dead River Flood



- Water continues downstream – crossing CR 510 (Steel Bridge)

CR 510 Steel Bridge

Dead River Flood



- Downriver, the floodwaters crest the McClure Dam

McClure Dam

Dead River Flood



McClure Dam

Dead River Flood



McClure Dam

Dead River Flood



- Floodwaters reach Forestville Dam

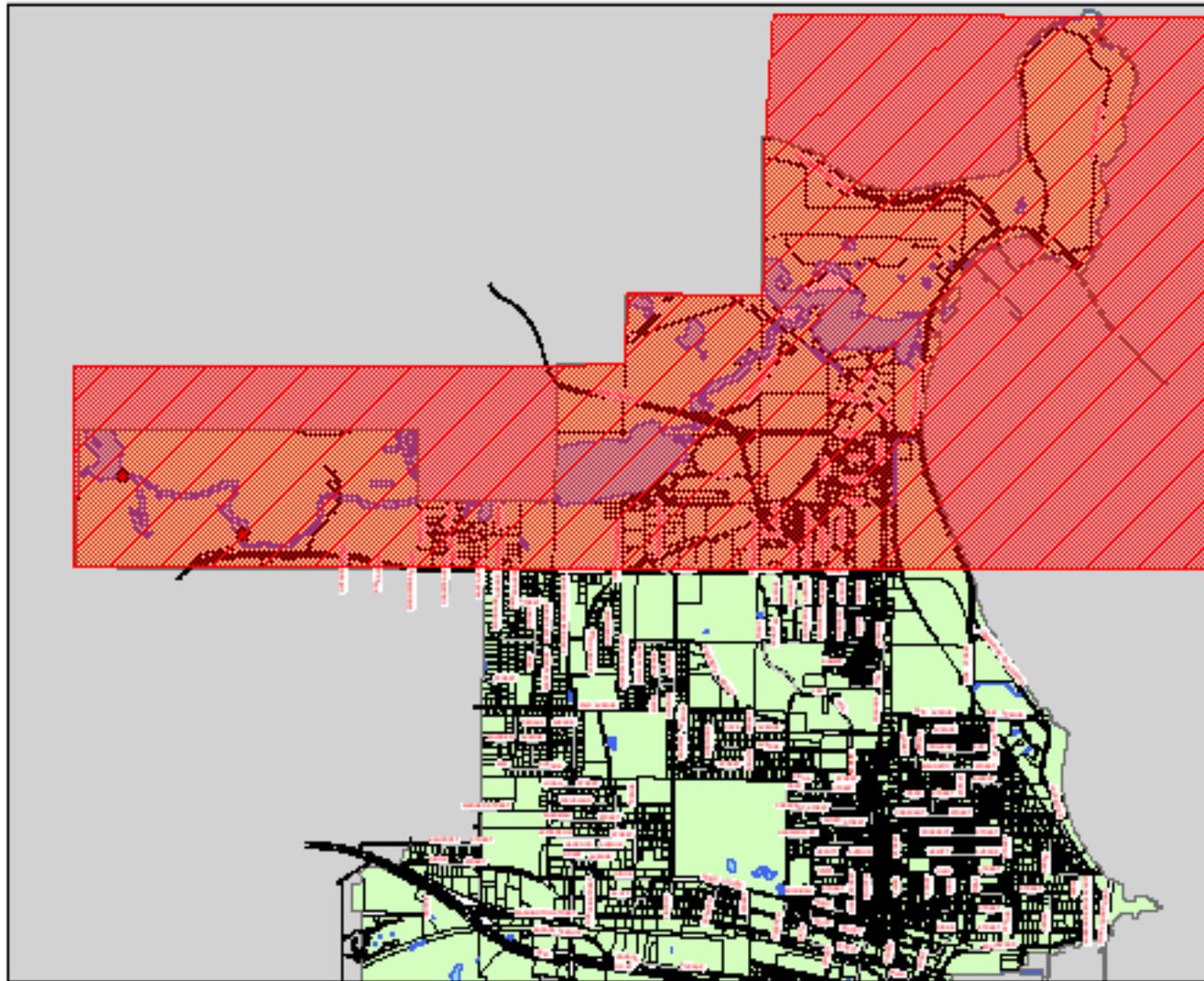
Forestville Dam

Dead River Flood



- Floodwaters destroy train trestle

Evacuation Area



City of Marquette
Community Development
Department

Legend

- dams
- Streams



2,800 1,400 0 2,800 Feet

Dead River Flood



- Flood Reaches Tourist Park and destroys the Dam

Tourist Park

Dead River Flood



Tourist Park Damage

Dead River Flooding



Tourist Park Damage

Dead River Flood



Tourist Park Damage

Dead River Flooding



CR 550

Dead River Flood



Presque Isle Power Plant

Dead River Flood



Lakeshore Blvd.

Dead River Flood



Lake Superior

Dead River Flood

- Evacuation of 2300 residents
- Major employers impacted:
 - WE Energy
 - Cleveland-Cliffs Iron Company
 - Northern Michigan University
 - Marquette Board of Light and Power
 - Argonics
 - Pioneer Labs
- At least 8 small to medium employers affected

Dead River Flood

- Three dams damaged
- Two dams failed
- Nine bridges damaged or destroyed
- Damage to two parks and three public access sites
- Major river channel realignments
- Major soil and stream bank vegetation loss
- Significant sediment deposition, debris field, and undetermined sheen discharged to Upper Harbor

Dead River Flood

- Substantial mobilization of emergency response system and support services
- 57 persons sheltered or fed by Red Cross
- Energy conservation instituted as a result of power plant shutdown
- Potential for significant personal property loss, carried off in flood waters

