



Presentation to

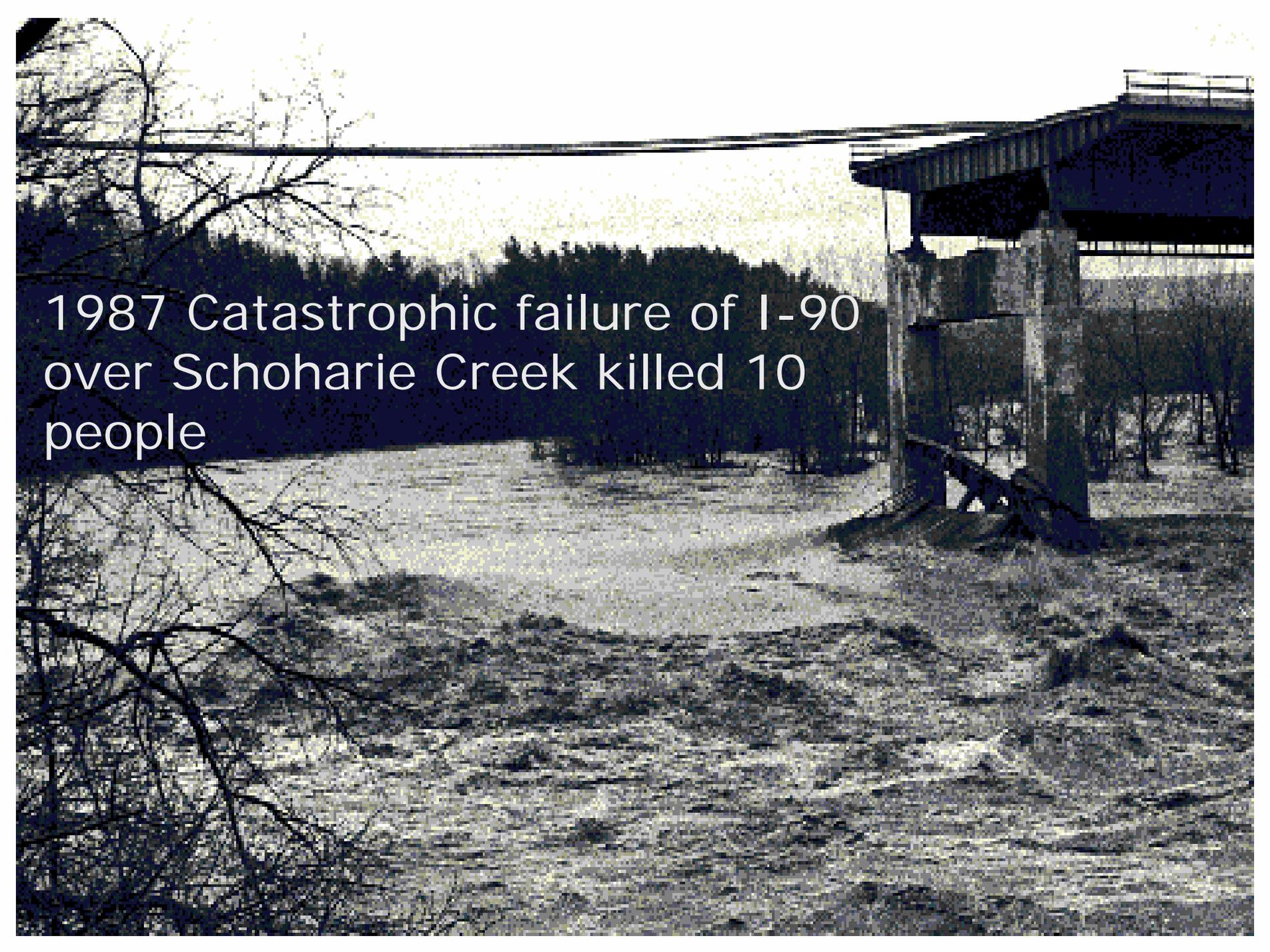


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August 2003

www.usengineeringsolutions.com

60% of all bridge failures can be attributed to Scour





1987 Catastrophic failure of I-90
over Schoharie Creek killed 10
people

The Problem

- States have spent millions of dollars on their Evaluation Programs
- Evaluation resulted in large populations of vulnerable bridges
- How do we manage these populations in the interest of public safety?

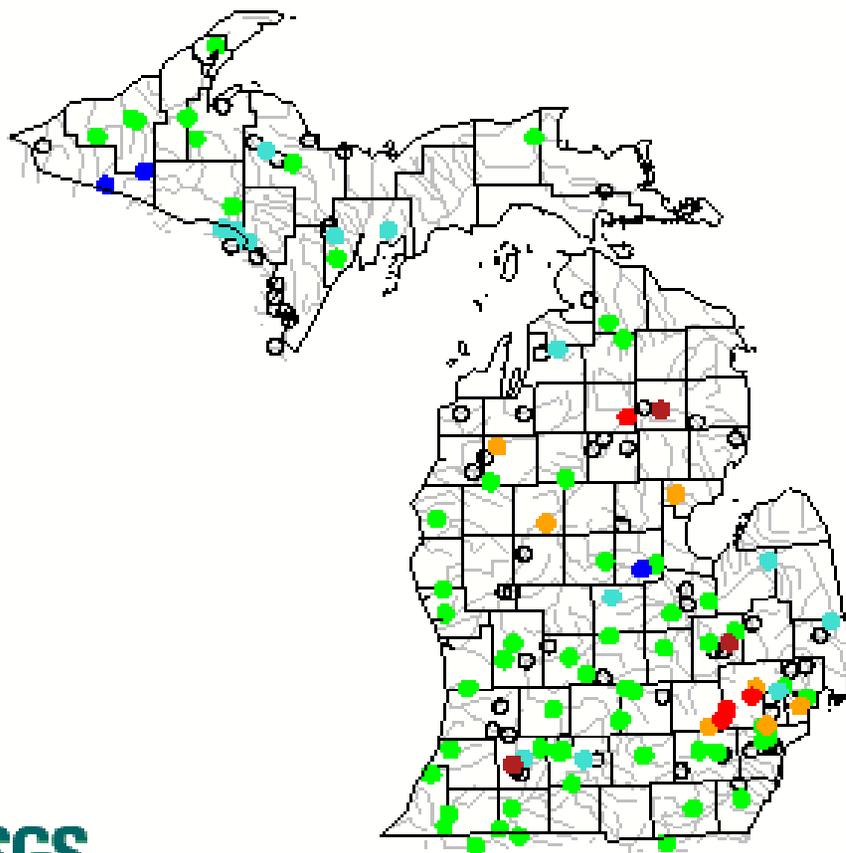
Real-time Environmental Monitoring

Stream Gauging

- The USGS operates and maintains more than 85 percent of the Nation's stream-gauging stations
- 7,292 stations dispersed throughout the Nation
- 4,200 are equipped with earth satellite radios that provide real-time data

Michigan has 149 Real-time gauging stations

Wed., Aug. 21, 2002 20:20ET



- New record high for day
- ≥ 90 th percentile
- 75th - 89th percentile
- 25th - 74th percentile
- 10th - 24th percentile
- < 10 th percentile
- New record low for day
- Not ranked

Implementing the Solution

- Cost effective
- Timely
- Comprehensive
- Automated



- **Identifies Critical Events Real-Time**
- **Displays Real-Time Event Influence Area**
- **Creates Watch List of Bridges Influenced**
- **Automated emergency notification 24/7/365**
- **Real-Time event and action plan management**
- **Strategy Tool for Transportation Officials**

System Architecture

