

# Geohazards Consulting Career

Stephen Thompson October 20, 2020

### Geologic and Seismic Hazards Consulting

- Personal involvement: 18 years with same core group
- LCI:
  - 40-person company, SF Bay Area HQ
  - Geologists and Engineering Seismologists
  - MS and PhD education; PG, CEG, PE licenses
- Employee owned
- Focus on large, critical infrastructure



### Geologic and Seismic Hazards Consulting

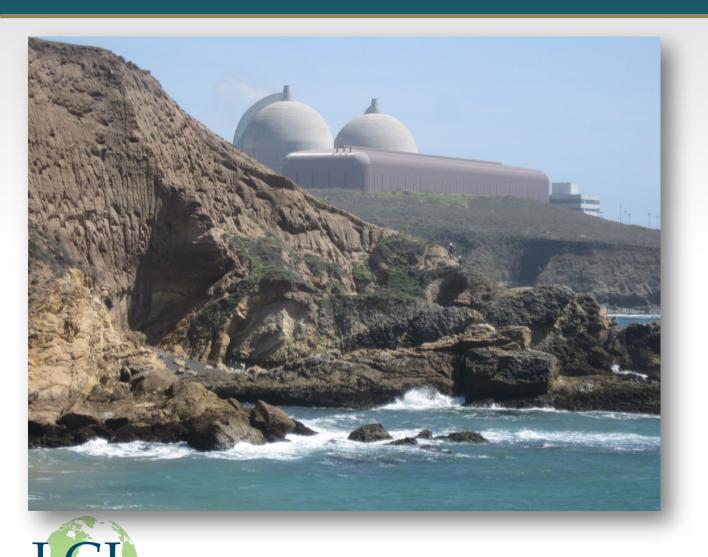
- Resiliency, reliability of infrastructure, communities
  - $Risk \cong Hazard \times Fragility \times$ Consequence
  - Help engineers evaluate risk by characterizing hazard
  - Help engineers design "safe" structures
  - Help communities understand hazards
- Critical Facilities, Lifelines





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# Geologic mapping, surveying





Diablo Canyon NPP San Luis Obispo, CA

#### **Fault Characterization**



Work for a siting study, western US





### Landslide mapping; Rock-mass characterization



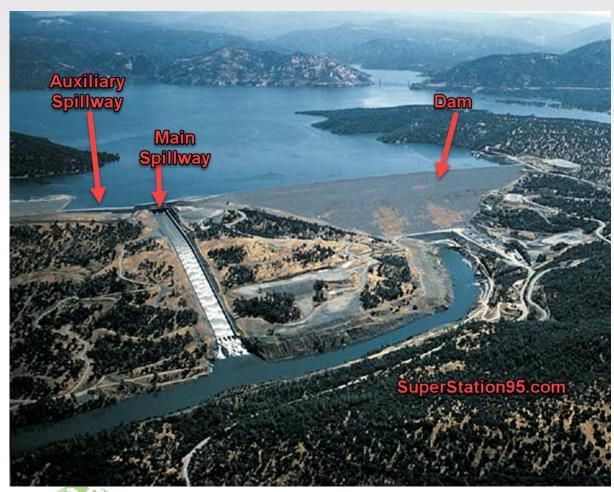
Hong Kong Highway Corridor



Caldecott Tunnel 4<sup>th</sup> bore Oakland, CA



### Lake Oroville, California - Feb. 2017







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### Lake Oroville Spillway Damage





Lettis Consultants International, Inc.

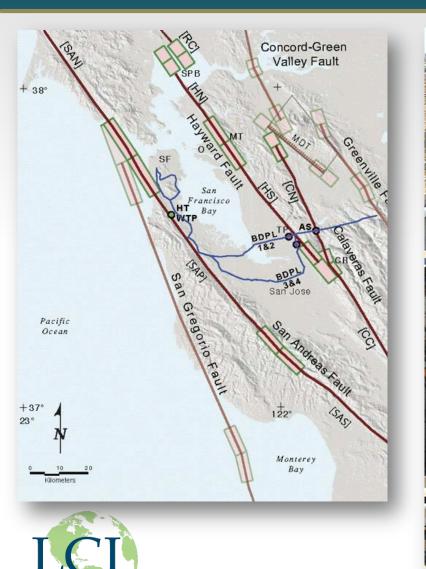
### Lake Oroville Spillway Damage



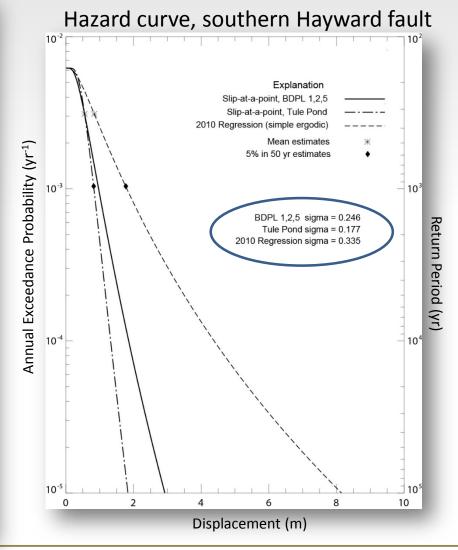


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#### Fault Displacement Hazard - Hetch Hetchy Aqueduct







# Pipeline Retrofits at Fault Crossings



