

Presentation

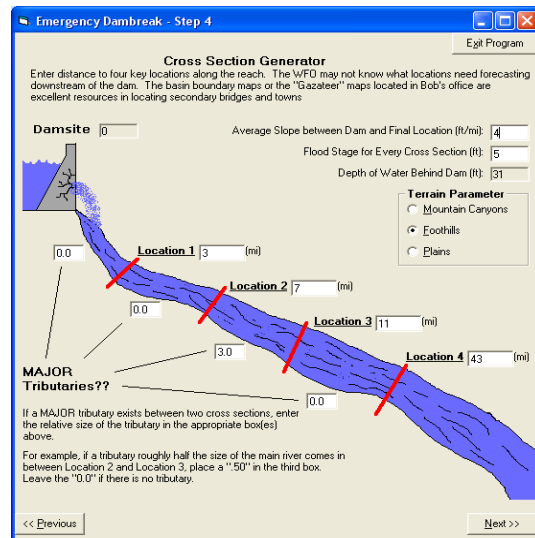
National Weather Service Role in Dam Emergency Events

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The National Weather Service issues forecasts for both the weather and rivers. It began collecting river information in 1873, and today the NWS has 122 weather forecast offices covering the nation and 13 river forecasting centers.

At the Pleasant Hill center, staff monitor watersheds covering 530,000 square miles of drainage area and 25 major river basins.

Besides their many duties, staff simulate current soil moisture conditions, snow cover, historical precipitation, temperature data, and other measures to determine "what if" scenarios.



To make dam break predictions and compute crest timing, they gather needed information:

- Height of dam
- Condition of dam (failed or not)
- Name(s) and location of dam
- Type of dam
- Initial pool elevation
- Initial storage or surface area
- Streambed elevation at toe
- Failure timing
- Breach width
- Outflow/spill prior to breach
- Critical downstream locations

A river forecaster, Kevin Low has been with the National Weather Service for 13 years and also with the U.S. Army Corps of Engineers as a hydraulic design engineer.

