

Examples of Vegetation, Fire, and Fuels Data

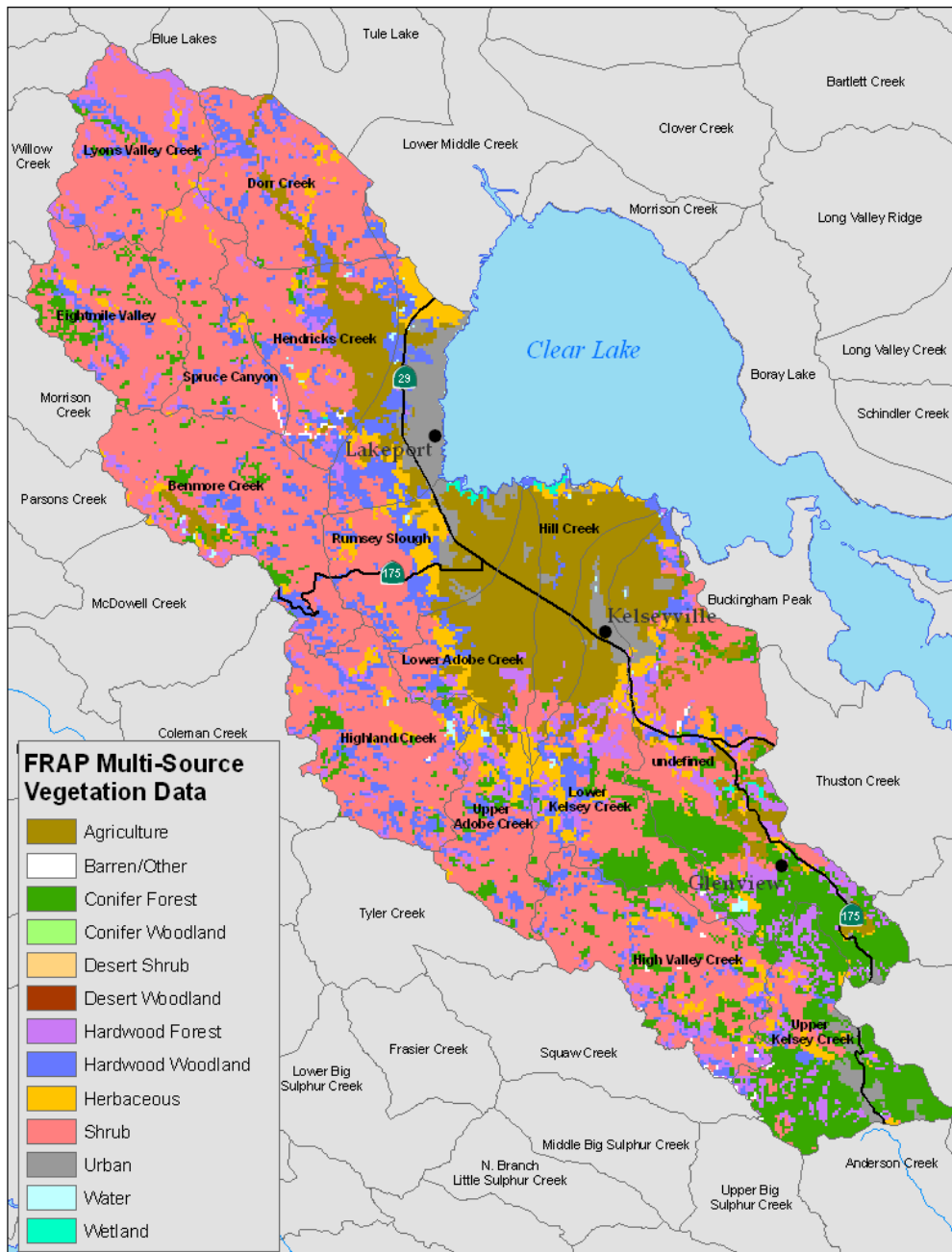
Chris Keithley
Department of Forestry and Fire Protection

January, 2007

Visit the CDF-FRAP web site to download data:

www.frap.cdf.ca.gov

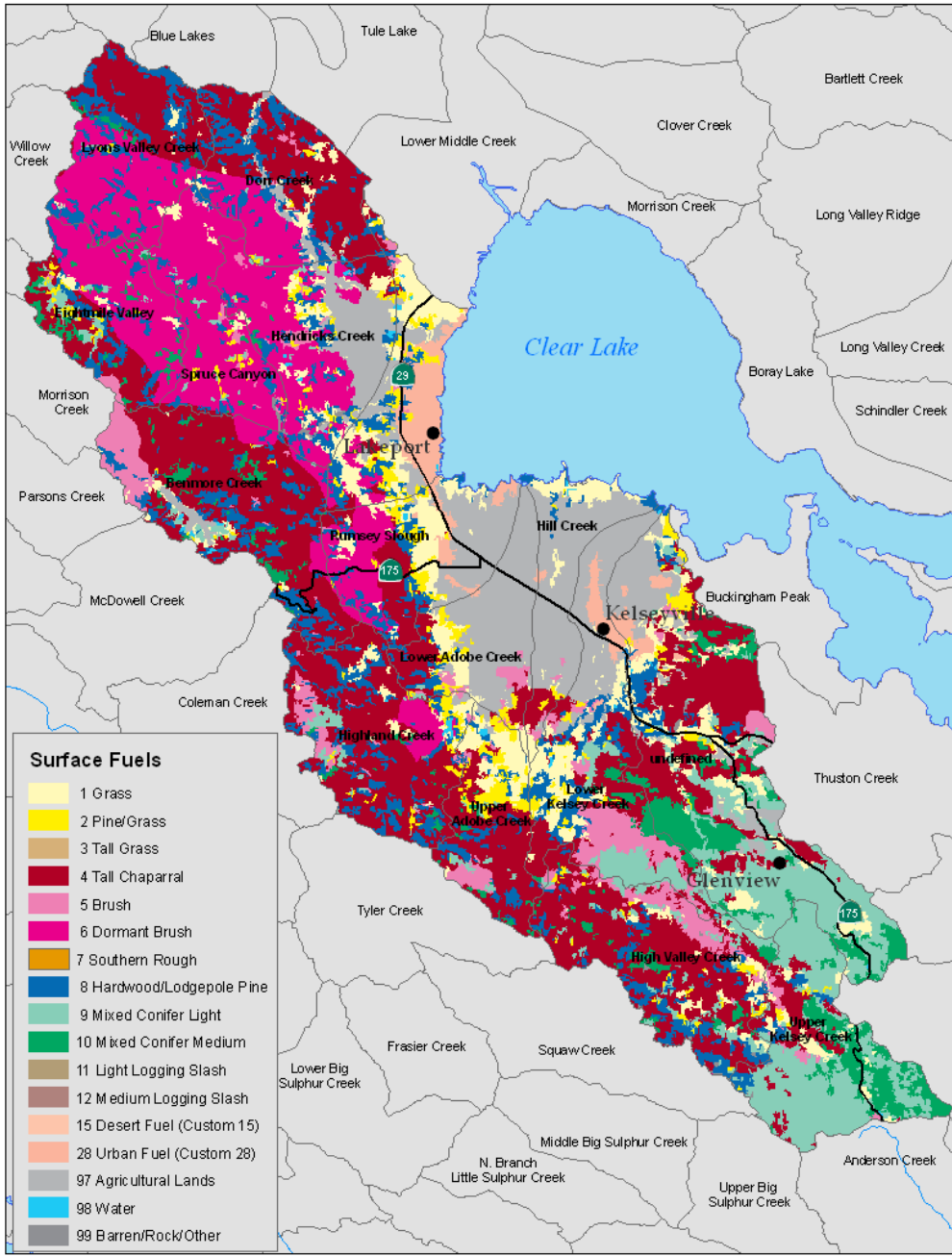
Vegetation Map



Vegetation Data

- Based on Landsat TM satellite imagery and FIA field plots.
- Contains structural estimates for tree size and cover.
- Minimum Mapping Unit is roughly 2 acres. Good for providing a complete assessment of vegetation across a watershed.
- Due to the complex habitat conditions the vegetation data is not as useful for riparian areas.

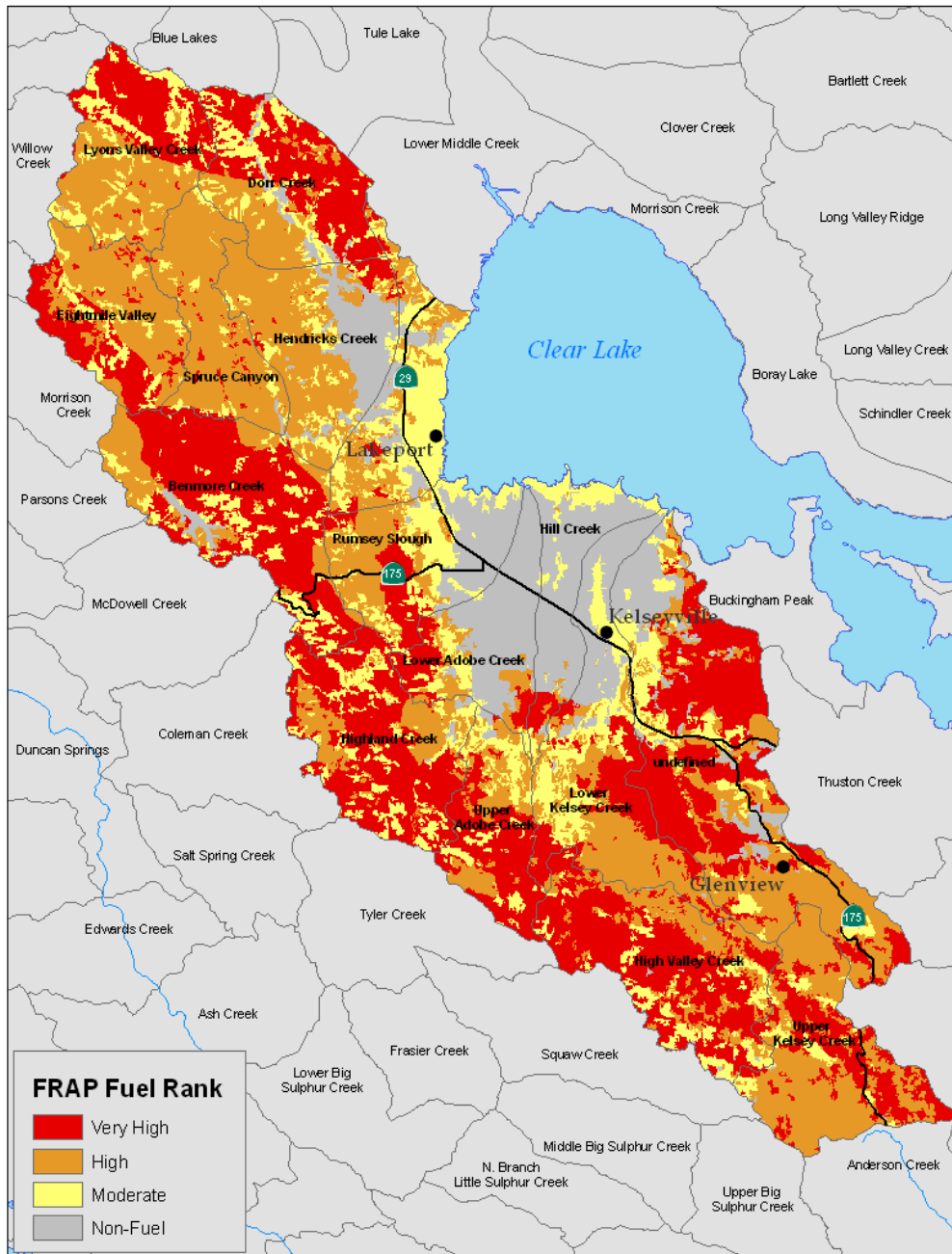
Surface Fuels



Surface Fuels Data

- Fuel models derived in part from vegetation data. Other factors include: slope, aspect, elevation, and fire history.
- Data is used to represent expected fire behavior and can be used as an input to fire behavior models like FARSITE.

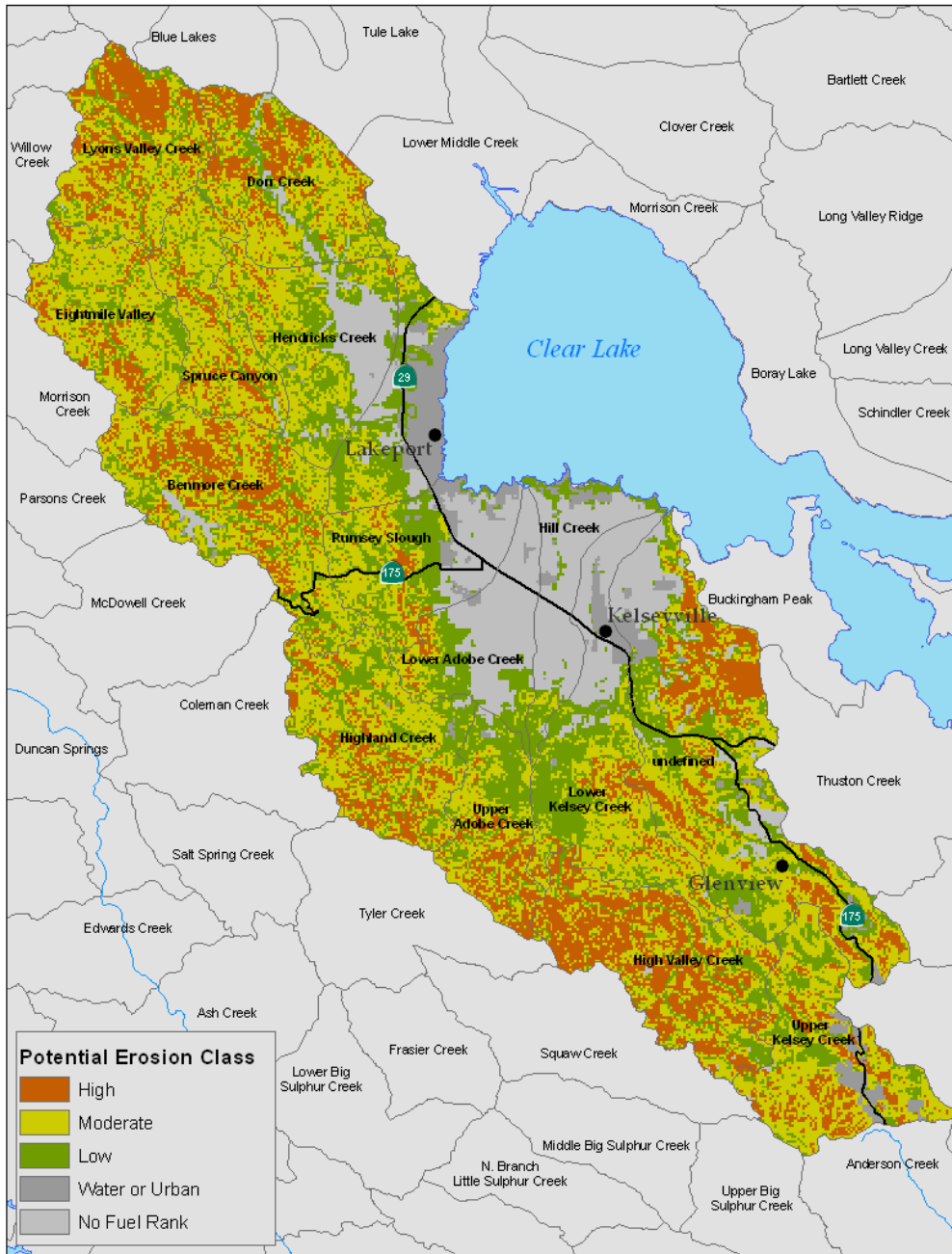
Fuel Rank



Fuel Rank Data

- The fuel ranking method assigns rank based on expected fire conditions.
- The data layer integrates topography, fuels and climatic data.
- Can be useful in identifying fuel reduction projects.

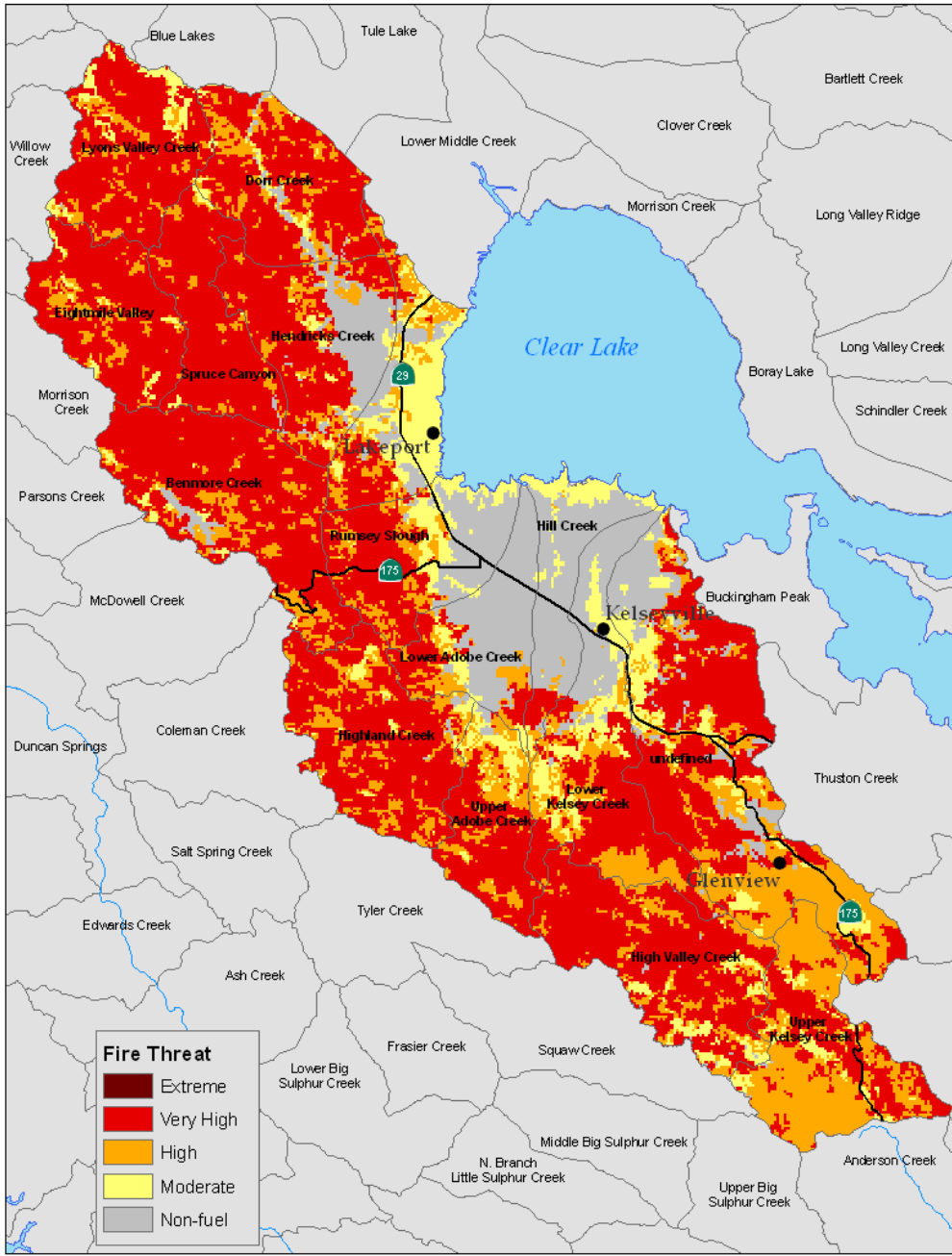
Potential Erosion



Post-Fire Erosion Potential Data

- Provides a general description of expected post-fire erosion.
- Estimates post-fire erosion using a modified version of the RUSLE equation. Predicted values (tons/ac) are grouped into 3 classes (low, medium, and high).

Fire Threat



Fire Threat Data

- A combination of fire frequency (i.e. likelihood of an area burning), and potential fire behavior.
- Represented by 4 threat classes from moderate to extreme.
- Can be used as general metric or indicator for describing the threat from wildfires in a watershed.

Other Fire Related Data

- Fire Perimeter Data. Over 50 years of fire history data for most watersheds throughout California
- Prescribe Burn Data. Contains recent information of prescribe fire for fuel reduction. The data record is incomplete for many areas.
- Fire Rotation. The return interval for wildfires is derived from historical fire perimeter data.