Appendix G
Sonoma County Hazard Mitigation Plan;
Methods and Sources Used for Hazard Assessment
Appendix
Sonoma County Hazard Mitigation Plan Appendix C
Methods and Sources Used for Hazard Assessment

This section describes the methods utilized to individually assess the hazards and risks of Sonoma County Hazard Mitigation Plan.

The Sonoma County Permit and Resource Management Department (PRMD), Department of Information System GIS division, was involved in the initial and final analysis of the earthquakes, floods, wildfires, and landslides hazards. PRMD GIS was solely responsible for data research and acquisition, and subsequent, review per quality assurance/control, data modeling and unilateral decisions regarding minor content/format changes to remain consistent with the presentation of specific hazards such as flooding.

Earthquakes, Floods, Wildland Fires and Landslides Analysis

This section describes how exposure and vulnerability assessments were conducted for earthquake, wildfire and landslide hazards for critical facilities and other important community elements.

The following content clarifies the data sources utilized during the HMP analysis per hazard.

Wildland Fires
• Wild Land Fire Threat (Figure 8.8)

The Sonoma County fire responsibility area feature class dataset was obtained from the California Department of Forestry and Fire Protection (CalFIRE) at http://www.fire.ca.gov/fire_prevention/fhsz_maps/fhsz_maps_sonoma.php (July 15, 2008 version). This dataset stored and readily available in PRMD’s GIS repository; it is assumed that all datasets included per exhibit if not mentioned within the contents of this document are current and reside within PRMD’s GIS repository (ex. City Limit, Main Arterials, etc.)

The fire protection responsibility areas (RA) dataset represents the legal fire protection obligation between the Federal (FRA), State (SRA) and Local (LRA) jurisdictions within Sonoma County. The fire protection responsibility areas are created, maintained and governed by the California Department of Forestry (CDF) and Fire Protection (CAL FIRE).

The California Department of Forestry (CDF) has a legal responsibility to provide fire protection on all State Responsibility Area (SRA) lands, which are defined based on land ownership, population density and land use. For example, CDF does not have responsibility for densely populated areas, agricultural lands, or lands administered by the federal government. To more efficiently provide protection over a more contiguous land base, CDF swaps protection areas with other providers, with the resulting lands being called CDF Direct Protection Area (DPA). SRA designations undergo a thorough 5 year review cycle, as well as annual updates for incorporations.

The Sonoma County fire hazard severity zone feature class dataset was obtained from the California Department of Forestry and Fire Protection (CalFIRE) at http://www.fire.ca.gov/fire_prevention/fhsz_maps/fhsz_maps_sonoma.php, c49fhszl06_1; publication date as of September 2009. The severity zones are categorized by “Very High”, “High”, and “Moderate.”
The Sonoma County fire station feature class datasets was obtained from the Sonoma County’s enterprise GIS server. The dataset is kept current per Emergency Operation Center (EOC) activation.

The map illustrates the fire hazard severity zones within Sonoma County in relationship to local and state fire responsibility areas.

• Historic Fires (Figure 8.9)

The Sonoma County historic fire feature class dataset was obtained on August 19, 2011 from the California Department of Forestry and Fire Protection (CalFIRE) at http://frap.cdf.ca.gov/data/frapgisdata/download.asp?spatialdist=1&rec=fire, fire.dn.zip; publication date as of March 22, 2011.

The Sonoma County fire station feature class datasets was obtained from the Sonoma County’s enterprise GIS server. The dataset is kept current per Emergency Operation Center (EOC) activation.

The map illustrates the chronology of historical fires within Sonoma County from 1939 to 2009.